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The usefulness of Financial Instruments Disclosure evidence from Jordan

Tahat, Yasean A.

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The Usefulness of Financial Instruments Disclosure: Evidence from Jordan

Yasean A. Tahat

A Thesis Submitted to the University of Dundee in Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy

School of Business
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United Kingdom

2013

Dedication

To my parents,

My beloved wife,

My lovely little kids, Mohammad & Abdalrahman,

My brothers and sisters, and

My Family

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I am very thankful to Almighty Allah for his guidance and blessings over my efforts during the course of this study.

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Thank you all…

Declaration

I hereby declare that I am the author of this thesis, that the work of which this thesis is a record has been done by myself, and that it has not previously been accepted for a higher degree.

Signed… ……..…….. Date……..……

Yasean A. Tahat

Certificate

We certify that Yasean A. Tahat has worked the equivalent of three years on this research, and that the conditions of the relevant ordinance and regulation have been fulfilled.

Signed…… Date…….

Dr. Theresa Dunne

Signed…… Date…….

Dr. Suzanne Fifield

Signed…… Date…….

Prof. David Power

Abstract

The International Accounting Standards Board (IASB) issued International Financial Reporting Standard No. 7 (IFRS 7) "Financial Instruments: Disclosure" in June 2006 as part of its ongoing refinement of existing financial instruments accounting standards. The new standard became effective for periods beginning on or after January 1st 2007 (IASB, 2006). IFRS 7 supersedes the previous International Accounting Standards (IASs): IAS 30/32. IFRS 7 states that information about Financial Instruments (FI) should be prepared in accordance with the management approach. In addition, the standard clarifies the disclosure requirements about FIs across all industries. In particular, the new standard consists of two main types of disclosures, namely: (i) discussion of the significance of FIs for an entity's financial position and performance; and (ii) the provision of qualitative and quantitative information about exposure to risks arising from FIs based on information provided internally to the entity's key management personnel.

The current thesis uses a decision usefulness theoretical framework to examine the impact of IFRS 7's adoption on FI disclosure practices and firm value. In particular, the current study has two primary objectives: (i) to assess the impact of IFRS 7 on the FI disclosure policies of Jordanian listed firms in their annual reports for 2007 when the standard became effective; and (ii) to examine the value relevance of FI disclosures. For these objectives, two pieces of empirical work were conducted respectively; a disclosure index technique was constructed and a valuation analysis was performed. A disclosure index analysis was undertaken for a sample of Jordanian listed companies' annual reports pre- and post- the implementation of IFRS 7. The extant literature and the findings from the disclosure index analysis informed the second part of the empirical work: the valuation analysis. Value relevance analysis was employed in order to assess the usefulness of FI disclosures

provided in the companies' financial statements; indeed, the association between the level of information supplied and firms' market values was examined.

The main findings indicate that the implementation of IFRS 7 had a significant and sizeable impact on the FI disclosure practices of Jordanian companies in 2007 as compared to that provided under International Accounting Standard No. 30 (IAS 30): Disclosures in Financial Statements of Banks and Similar Financial Institutions and International Accounting Standard No. 32 (IAS 32): FIs: Presentation. In particular, the results revealed that the number of companies disclosing information about FIs as well as the level of FI information provided significantly increased after IFRS 7 was implemented. In addition, the analysis of FI disclosure by industry revealed that comparability of financial statement data within and across the sectors examined has improved. In particular, an analysis of Balance Sheet and Fair Value information about FIs revealed no significant differences within and across industries after IFRS 7 became effective.

The findings from the valuation analysis revealed that FI disclosure was value relevant over the two periods. However, the regression analysis showed that the FI disclosure provided under IFRS 7 was more value relevant as compared to that supplied under the previous standards. The principal components analysis revealed that some categories of FI information were more influential than others. In particular, Balance Sheet, Income Statement, Fair Value and Risk information about FIs were valued differently as compared to other components of FI disclosures. Indeed, the evidence provided indicates that investors value FI disclosure when making investment decisions.

In general, the findings support the decision usefulness approach underpinning the current FI disclosures for Jordanian listed companies. Specifically, In particular, the test of differences in FI disclosure within and across sectors revealed that the implementation of IFRS 7 has enhanced the comparability of the financial statements; no significant differences were noted in FI disclosure (balance sheet and fair value) post-IFRS 7, while this was not the case pre-IFRS 7. In addition, the issue of relevance has been investiagted by testing the association between FI disclosure and firm value. These findings provide a great deal of insight for accounting regulatory bodies (e.g. the IASB) about the current theoretical framework that underpins financial reporting standards. In addition, they provide valuable insights to Jordanian policy makers (JSC and ASE) about the relevance of such standards for Jordanian companies.

Chapter One

Introduction

1.1 Preamble

FIs are financial contracts whose value depends on, and are derived from, the value of an underlying asset, reference rate or index (Bullen and Porterfield, 1994). More specifically, the IASC (1996) defined an FI as "any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise" (IAS 32, Para. 11). Indeed, Lee and Tan (1994) have argued that FIs can be both primary instruments (non-derivatives such as receivables, payables, equity securities) and secondary instruments (derivatives such as forward contracts, options).

Recent years have seen a proliferation of new and increasingly complex FIs traded on a large number of financial markets in both developed and developing countries (Grant and Marshall, 1997; Mallin et al., 2001; El-Masry, 2006; Nguyen et al., 2009; Yakup and Asli, 2010; Naito and Laux, 2011). Entities employ such instruments to transform their financial positions, enhance their reported performances and adjust their risk profiles (Dunne et al., 2004). For example, in the UK, 90% of companies use financial products in their activities (Grant and Marshall, 1997). Specifically, the Derivatives Market Activity Reports indicate that the trading volume of derivatives has increased from $100,000 billion in 2001 to $700,000 billion in 2010 (Bank for International Settlements, 2010). The extant literature has highlighted a number of factors that have led to this explosive growth in the usage of FIs. First, the finance industry has been successful in creating a variety of new Over-The-Counter (OTC) and exchange-traded products that are designed to suit the specialist needs of certain firms (Li and Gao, 2007). Second, deregulation of the financial services industry, increased competition among financial institutions, changes in tax laws and developments in information technology have also contributed to an increase in the usage of these

products (Gebhardt et al., 2004; Kim et al., 2008; Bartram et al., 2009; Jacque, 2010; Gebhardt, 2012).

Despite the fact that firms claim to use FIs for hedging financial exposures, the last two decades have witnessed many financial scandals and corporate collapses which have been attributed to the use of FI derivatives for speculative purposes (Jayaraman and Shrikhande, 1997; Jacque, 2010). Indeed, evidence was provided that weaknesses in accounting regulation (including recognition, measurement and disclosure) were one of the reasons for such debacles which caused by using FIs. Disclosure on FI matters is considered to be one of the most important items of information provided in corporate annual reports due to its influential impact on a firm's financial position and performance (Johnson et al., 1994; Li and Gao, 2007; Hassan and Mohd-Saleh, 2010). As a result, major accounting regulators, including the Financial Accounting Standards Board (FASB)[1] and the International Accounting Standards Board (IASB), have sought to issue new accounting standards and tighten regulations in this area (Richie et al., 2006). The objective of these pronouncements is to enhance users' understanding of the significance of FIs to a firm's financial position and performance (Ighian, 2012).

The current study examines FI disclosure for Jordanian listed companies; these companies have applied IAS/IFRS since 1997. Thus, FI-related accounting standards which have been issued by the IASB are examined in this thesis. Specifically, the IASB issued three standards relating to FI disclosure, namely: (i) IAS 30: Disclosures in Financial Statements

[1] The current study acknowledges that FASB's conceptual framework plays a key role in informing the IASB's framework; hence, the discussion of the IASB's theoretical framework entails some explanations of the FASB perspective. In addition, the discussion of the accounting standards concerning FI disclosure consists of standards issued by both the IASB and FASB in order to highlight any similarities and differences that exist.

of Banks and Financial Institutions in 1995; (ii) IAS 32: Financial Instruments: Disclosure and Presentation in 1998; and (iii) IFRS 7: Financial Instruments: Disclosure in 2006. In particular, IFRS 7 replaced FI disclosure requirements which had previously been contained in both IAS 30 and IAS 32 (IASB, 2006). Accordingly, by 2007, IFRS 7 had to be applied by all Jordanian listed firms (financial and non-financial); it covers all types of FIs as well as the risks arising from the use of these products (IASB, 2006b).

IFRS 7 has considerably expanded the scope of FI disclosure requirements which had been relatively narrow in the previous standards (Coetsee, 2010a). Specifically, IFRS 7 requires firms to supply two main categories of FIs disclosure. First, an entity must provide information about the significance of any FIs used, including: (i) accounting policy disclosures; (ii) balance sheet disclosures; (iii) income statement disclosures; (iv) hedging disclosures; and (v) fair value disclosures (IASB, 2006b, para. 7-29). Second, an entity must provide information about the nature and extent of any risks arising from the use of FIs, including: (i) qualitative disclosures about the risks associated with any FIs employed; and (ii) quantitative disclosures about risks associated with FI usage including all types of risks, namely: credit risk, market risk and liquidity risk (IASB, 2006b, para. 30-42).

The current thesis has two main objectives. First, it seeks to assess the impact of IFRS 7 on the FI disclosures of Jordanian listed firms in their annual reports for 2007 when the standard became effective. Specifically, the empirical investigation for the first objective compares the annual reports for a sample of first-market companies in 2007 prepared under IFRS 7 with the annual reports for the same sample in 2006 prepared under IAS 30/32. A disclosure index approach is used to analyse FI-related information in the financial statements of the sample companies. The second objective of this thesis is to examine the

value relevance (usefulness) of FI disclosures. The valuation model of Ohlson (1995) was adopted for this purpose. Specifically, the thesis investigates whether FI disclosure is value relevant and can explain cross-sectional differences in companies' market values[2].

The remainder of this chapter is organised as follows. Section 1.2 outlines the motivation of the current study; it indicates why this topic was selected for investigation. Section 1.3 explains the theoretical framework adopted as well as outlining the different research methods used in the current thesis to address the hypotheses being examined. Section 1.4 highlights the contribution of this thesis. Section 1.5 summarises the structure of this thesis and provides the reader with a 'road map' for the remainder of the PhD. Finally, a conclusion for the chapter is provided in Section 1.6

1.2 Motivation for the Study

A number of reasons underpin my decision to undertake this topic. Firstly, my interest in the study of accounting about FIs started when I was undergraduate student; as a student at the University of Al Al-bayt, I was exposed to a number of financial accounting modules that ignited my interest about the role of FIs (especially derivatives) in determining a firm's financial position and performance as well as its influence on firm market value. My knowledge about this area deepened during my MA degree in accounting where I took a special module on FIs. Unfortunately, I was not able to research the topic of FIs in my Master dissertation as my supervisor in that time directed me to the field of auditing. However, this interest in FIs remained dormant until my employer granted me a scholarship

[2] The term "Relevance" is referring to one of the qualitative characteristics for accounting information to be considered useful. "Value relevance" refers to the examination of the relationship between accounting information and firm value; hence, information is relevant if it is capable of making a difference to a user's decision (Barth et al., 2001). The association with firm value and capital market response are ways in which the value relevance of information can be ascertained. Consequently, the usefulness of accounting information could be evaluated by its value relevance.

to study for a PhD. This interest in FIs coincided with a growing awareness about the importance of this topic both in Jordan and internationally. A great deal of controversy erupted in the extant literature about the negative impact of such instruments (Jacque, 2010). Specifically, financial scandals associated with losses from using such instruments throughout the world (including Jordan) provided me with some assurance that this topic was suitable for PhD research.

In addition, the importance of FIs in general, and derivatives in particular, in Jordan has increased over the last few years. In fact, the corporate usage of derivatives among Jordanian firms (especially large companies) has risen (Al-Rai, 2004). Indeed, the growing reliance of the Jordan economy on external exports has forced Jordanian companies to increase their usage of FI products (mainly derivatives) in order to maintain the stability of their cash flows and smooth revenues (Siam and Abdullatif, 2011). Therefore, it is not surprising that the use of derivative contracts by key Jordanian companies (such as Jordan Petroleum Refinery, Arab Potash Co. and Jordan Telcom) increased by 34% in the period between 2003 and 2006 (Al-Etisadiah, 2007). In addition, the misuse and the abuse of FIs (both derivative and non-derivative) was a key factor that led to the collapse of one of the largest Jordanian banks in 1990, the Petra Bank (*The Judicial View*, 2008). In particular, the audits carried out by Arthur Andersen revealed that the bank's assets had been overstated by $200 million as a result of trading in derivative contracts such as foreign exchange and equity instruments (The Guardian, 2003). Furthermore, the audits confirmed that transactions relating to this loss were approved by the bank's top management (The Guardian, 2003). This specific case was one of the main reasons for basing the current study in Jordan.

Moreover, since most of the current evidence about the impact of FI-related accounting standards has focused on developed countries (Bischof, 2009; Bamber and McMeeking, 2010), additional international evidence about the effect of such standards in developing countries was needed. The current study provides such evidence via the empirical investigation about the impact of FI-relating pronouncements issued by the IASB on FI disclosure. Jordan is a very different context within which to study the impact of a new standard concerning FIs as compared to developed countries; the stage of its economic developments, its legal system and its culture are all different.

Indeed, as a result of recent changes to the Jordanian economy, a different institutional background has emerged. Specifically, the past two decades have witnessed a dramatic level of political and economic development; this development has been one of the distinguishing features of modern Jordan history (Al-Omari, 2010). These developments include: (i) the establishment of a Jordanian capital market; (ii) the launch of a privatisation programme; (iii) the enactment of new business and economic laws; (iv) the establishment of the accounting profession; and (v) the adoption of IAS/IFRS. As a result, the legal system of the country has shifted towards the common law system which characterises the legal origin of countries such as the US and the UK; the level of shareholder protection has increased and the capital market has become the main source of financing for the corporate sector (Al-Akra et al., 2009). These developments have led to an increase in the amount of foreign direct investment which has added an element of diversity to the Jordan context; it has opened up the corporate sector to the demand of investors for decision-useful information. Overall, such advances within the country have made Jordan an ideal location to study the impact of IFRS 7 on the level of FI disclosure provided by Jordanian listed

companies. In Chapter 2 the Jordanian context is discussed in detail so as to provide justification as to why the research title should be Jordan.

Indeed, IFRS 7 is the latest FI-related disclosure standard to be issued by the IASB; the new standard became effective in January 2007[3]. Indeed, expectations about the impact of this standard on FI disclosure were high (Gornik-Tomaszewski, 2006). For example, 79% of the respondents on the IFRS 7 Exposure Draft suggested that the new standard itself was their key source of information about gaining an understanding of the requirements involved and there was no complexity associated with IFRS 7 (ACCA, 2009). In addition, Ernst and Young (2006) argued that there was an expectation that the FI information which would be provided under IFRS 7 would be more useful since management was responsible for the process of preparing such information. In this regard, the management approach adopted by the current study is limited to that explained in IFRS 7 which may be different from the management approach employed by other accounting standards such as IFRS 8. In particular, IFRS 7 states that the quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. (IFRS 7, IN5). The standard states that *key management personnel* are those defined in IAS 24 which can include an entity's Board of Directors, chief executive officer or any authorised department. Specifically, IAS 24 states that:

> "Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including any directors (whether executive or otherwise) of the entity" (IAS 24, para, 24.9).

[3] There were no Jordanian companies among those who commented o the Exposure Draft of IFRS 7.

Similarly, the respondent comments to IFRS 7 suggested that the requirements for qualitative disclosures and management discussion included in the new standard were essential for shedding light on quantitative disclosures and a company's overall risk management policy (CFA, 2011). However, some concerns were raised about the new standard. For example, the Australian Accounting Standards Board (AASB) stated that the proposed disclosures required by IFRS 7 were particularly onerous; the Board expressed concern that the additional disclosure was a substitute for what may be perceived as an unsatisfactory consolidation framework (AASB, 2011). In addition, some comment letters questioned the ability of the existing companies' systems to provide some of the information required by the standard such as "*Sensitivity Risk Analysis*" (IASB, 2006). These expectations and concerns about IFRS 7 provided a great deal of inspiration for the current study; they suggested that the impact of IFRS 7 needed to be investigated in order to examine the usefulness of FI disclosures provided by Jordanian listed companies.

To date, there is very little research about the impact of IFRS 7 about such vital instruments in financial statement disclosures. In particular, current evidence in the substantive literature about the impact of IFRS 7 is confined to developed countries in general, and European nations in particular (Bischof, 2009; Bamber and McMeeking, 2010). Thus, more international evidence about the impact of this new standard on FI disclosure practices is needed. The current thesis attempts to supply this evidence by examining the impact of IFRS 7 in Jordan. In addition, current evidence on the influence of IFRS 7 has tended to focus on compliance with the new standard. Most studies in this area have contributed to our understanding of whether or not companies are disclosing all the information which IFRS 7 mandated. Given the importance of such instruments to a firm's financial position and performance, it is surprising that no study has examined the capital market response to

this standard. Thus the current study addresses the impact of IFRS 7 on both the FI disclosure practices and the market values of Jordanian listed companies.

Jordan has adopted IAS/IFRS since 1997; this long time span makes Jordan an ideal country for researching the implementation of IFRS 7 since investors and other users are already familiar with the standards issued by the IASB. In addition, over the last two decades, Jordan has undergone a series of major market reforms including a privatisation programme (Al-Akra et al., 2009) and a stock market development process (Omar and Simon, 2011). These reforms are intended to make Jordan an attractive location for foreign as well as domestic investment; appropriate disclosure practices and enhanced transparency requirements as regards to the performance of listed firms have been key components of this reform process (Omar and Simon, 2011). In addition, these reforms have sought to improve the usefulness of corporate information that is made available to the public in order to attract foreign investors into the capital market (Al-Akra and Ali, 2012). As a result, Jordan has become a more open economy with local firms exporting products and services internationally to many countries; the issue of FI reporting and compliance with IFRS 7 is therefore an interesting topic to examine from the perspective of Jordanian companies' financial statements.

Prior studies about FI reporting in developing countries are relatively sparse (Hassan and Mohd-Saleh, 2010). To the best of the researcher's knowledge, investigations about FI reporting in Middle Eastern countries in general, and in Jordan in particular, are uncommon. To date, the only study about FI reporting in Jordan was conducted by Rahahleh and Siam (2009). This study investigated the perceptions of auditors, preparers and investors about the impact of IAS 32 on the presentation and disclosure of FIs made by

Jordanian listed banks. The findings revealed that there was agreement on the importance of applying IAS 32 among the sample firms consulted. The current research adopts a different research approach by examining whether the introduction of IFRS 7 has improved compliance with FI disclosure requirements among Jordanian listed companies and whether such improvements are value relevant.

Finally, prior investigations into the usefulness of FI reporting information on developing countries have often focused on either users' and preparers' perceptions or the quantity of corporate disclosure (Hafiz, 2003; Hassan et al., 2006b; Rahahleh and Siam, 2009). A review of the extant literature shows that the impact of publicly available FI-related information on capital market participants has focused on developed markets around the world such as the US and Australia (Hassan and Mohd-Saleh, 2010). However, very little work in this area had been undertaken for emerging market countries; this is especially true for Jordan where no study has examined the share price or trading volume reaction to a new financial reporting standard such as IFRS 7. Therefore, it was felt that a comprehensive investigation of the impact of the recent FI-related accounting standard on the market value of Jordanian listed companies would make an important contribution to our knowledge about the usefulness of disclosures mandated under IFRS 7 using both behavioural and market-based research approaches. The use of such a mixed-methods approach is intended to add an element of robustness to the research findings. In addition, it was thought that any findings about the value relevance of FI disclosures would contribute to our understanding in the area; such an investigation would summarise the actions of investors as a group and add "flesh to the bones" of previous findings that have concentrated on perceptions using a postal questionnaire. It will provide a great deal of insight about how the capital market reacts (overall investors' behaviour) to financial statements prepared under IFRS 7.

1.3 Theoretical Framework and Methodology Employed in the Study

Collis and Hussey (2009) argued that the process of building a theory in research consists of two approaches: inductive and deductive research. While the former is a study in which theory is developed from the observation of empirical reality and general inferences are induced from particular instances, the latter is a study in which theory is developed and then tested by empirical observations; thus particular instances are deduced from general inferences. In this regard, the current study adopts a deductive approach where the decision usefulness theory is developed from the extant financial accounting literature and then tested via the two pieces of empirical work carried out: the analysis of FI disclosure provided by Jordanian listed companies and the study of this information's value relevance.

A decision-usefulness approach is adopted as the theoretical framework underpinning the current study. According to this approach, corporate disclosures are attempts to dissipate informational asymmetries between firms and external agents, primarily agents in the investment community[4] (Gray et al., 1995). Specifically, Tilt and Symes (2004) argued that the decision usefulness approach suggests that organisations disclose information that users find useful for investment purposes. Indeed, the decision usefulness approach underpins the accounting standards examined in the current study (IASC, 1989; IASB 2006a; 2008a). In fact, the Joint Project framework of FASB and the IASB represented the culmination of the decision usefulness approach where both boards agreed that the primary objective of financial statements is to provide useful information for users (IASB, 2006a). They identified a number of qualitative characteristics for useful accounting information, namely:

[4] According to this approach, corporate disclosures are attempts to provide useful information for making investment decisions, which in turns, dissipate informational asymmetries between firms and external agents, primarily agents in the investment community (Gray et al., 1995).

relevance, reliability (faithfulness representation), comparability, and understandability; their continuing work on this project has specified that relevance and reliability are the fundamental characteristics of useful information.

The notion that accounting information should provide users with useful information for capital investment decisions can be traced back to the 1950s (Chambers, 1955; Sterling, 1972; Staubus, 1976). In particular, Staubus (1976) stated that:

> "The objective of accounting is to provide financial information regarding an enterprise for use in making decisions. The objective of accounting to investors is to provide financial information regarding an enterprise for use in making investment decisions [investors have always included owners and creditors] (p. 276).

A number of measures were highlighted in the prior accounting literature as proxies for the usefulness of information. First, the perceptions of users and preparers of accounting information are often considered important when assessing whether financial information is useful for aiding their investment and other decisions (Nelson and Strawser, 1970; Brenner and Shuey, 1972; Buzby and Falk 1979; Snowball, 1980; Belkaoui 1980; Dierkes and Antal 1985; Belkaoui and Karpik 1989; Bovee et al., 2009; Mardini, 2012). These two groups are seen as key stakeholders in the communication and stewardship process which the IASB is attempting to regulate. There are a number of ways of gathering the views of stakeholders about the usefulness of financial statement information. For example, opinions can be obtained directly via postal questionnaires or interviews.

Alternatively, views can be ascertained indirectly by examining the impact of stakeholder actions following the publication of the information on important variables which are observable by researchers. One such variable is share price which should be affected by the supply and demand for shares as investors alter their portfolios following the disclosure of

financial statement information. Thus, market based accounting research is one of the most commonly used ways of assessing the usefulness of publicly available accounting information (Ball and Brown, 1968; Archibald, 1972; Ball, 1972; Beaver and Dukes, 1973; Spicer, 1978; Mahapatra, 1984). This strand of research examines the relationship between accounting information and share prices (or returns); the capital market can be thought of as the aggregate view of all investors (Beattie, 2005).

Second, the amount of information provided in the financial statements about a company's operations and activities was considered a sign that the information might be useful (Singhvi and Desai, 1971; Buzby, 1974; Firth, 1979; Kahl and Belkaoui, 1981; McNally et al., 1982; Dunne et al., 2003; 2007; 2008; Finningham, 2010). In particular, Ijiri (1983) stated that:

> "In a decision based framework, the objective of accounting is to provide information useful for economic decisions. It does not matter what the information is about. More information is always preferred to less as long as it is cost effective. Subjective information is welcome as long as it is useful to the decision makers" (p. 75).

The current study adopts the two techniques in order to assess the usefulness of FI disclosure supplied by Jordanian listed companies, the disclosure index and valuation analysis. The selection of these two methods was based on their validity and generalisability in financial reporting research. In addition, the issue of accessibility was one of the justifications for choosing such methods. Specifically, the secretive nature of Jordanian society, which is not used to talking freely about financial issues (Piro, 1998; Mardini, 2012) represented another reason as to why the researcher decided on these methods.

In order to achieve the two objectives of the current study, an appropriate research methodology was selected and employed. In particular, Burrell and Morgan's (1979) framework was adopted to explain the philosophy used to underpin the current research; the combination of a realist ontology, a positivist epistemology, a deterministic view of human nature and a nomothetic methodology suggested that the functionalist paradigm was the most appropriate. Thus, the methods are mainly functionalist, namely: the disclosure index technique and value relevance analysis. Value relevance analysis is used because of the dearth of prior work on corporate disclosure in the Middle Eastern area in general, and in Jordan in particular. According to Ijiri (1983), the choice of a theoretical framework will critically affect the research process, the findings arrived at and the interpretation of the phenomena being studied. Specifically, the current study is mainly located in the functionalist paradigm and its theoretical framework is based on decision usefulness theory; this theory is used to interpret the findings and answer the research hypotheses that are being investigated.

A number of methodological choices were made by the researcher when conducting the work in this doctorate. The disclosure index is constructed based on accounting standards examined in the current study as well as findings from the extant literature. In particular, the un-weighted approach is adopted; the dichotomous method is used for constructing the index whereby an item is scored 1 when it is disclosed and 0 otherwise. However, a mark of NA is given for the item where it is not applicable to a firm's operations. The validity and the reliability of the disclosure index are examined. Other choices could have been made such as an analysis of disclosure based upon the content of financial statements which focuses on the proportion of the annual report devoted to FI-related information (Dunne, 2003). Instead, the approach which concentrated on whether the requirements of

the standards examined were complied with was thought to be more appropriate for addressing the research objectives in the current thesis.

In order to examine the value relevance of FI disclosures, the Ohlson model (Ohlson, 1995) is adopted; the analysis involving this model is conducted for the percentage of overall FI disclosure and for the sub-categories of FI information. In particular, the investigation aims to examine whether investors value FI-related information when making investment decisions by according disclosures of such information higher or lower share prices on a systematic basis. The result of this examination will indicate whether FI information is useful by testing whether or not its publication causes investors to revise their beliefs about the worth of company shares and possibly alter the constituents of their equity portfolios. With respect to value relevance analysis, the study takes a number of issues into consideration. First, the assumptions underlying the value relevance analysis are examined prior to the investigation being conducted. For example, the normality and linearity assumptions which underpin the valuation model employed are tested and met. Second, collinearity and heteroscedasticity issues are also investigated. After ensuring that the data are appropriate for the proposed investigation, the study analyses the value relevance of FI information.

1.4 Research Objectives and Hypotheses

As Section 1.1 indicated, the research objectives of the current study are: (i) to examine the impact of IFRS 7 on FI disclosure provided in the financial statements of Jordanian companies as compared to that provided under IAS 30/32; and (ii) to investigate the value relevance (usefulness) of FI disclosure pre- and post- the implementation of IFRS 7. To this end, six hypotheses are proposed within the current study in order to achieve the two

objectives. The extant literature in this financial reporting area indicated that the introduction of new accounting standards resulted in: (i) an increase in the number of companies supplying FI disclosure (Edwards and Eller, 1995; Chalmers and Godfrey, 2004; Chalmers, 2001; Hassan et al., 2006b); (ii) an improvement in the level of corporate FI disclosure provided (Roulstone, 1999; Chalmers and Godfrey, 2000; Chalmers, 2001; Dunne et al., 2004; Woods and Marginson, 2004; Hamlen and Largay, 2005; Lopes and Rodrigues, 2006; Strouhal, 2009; Murcia and Santos, 2010); and (iii) differences in corporate FI disclosure practices across sectors (Dunne et al., 2003, Hassan et al., 2006b)[5].

Hence, in order to meet the first objective of the thesis, which seeks to uncover the impact of IFRS 7 on FI disclosures provided by Jordanian listed companies, three hypotheses are proposed. First, the current study seeks to investigate whether the introduction of IFRS 7 has led to an increase in the number of Jordanian listed companies publishing FI-related information. Hence, the first hypothesis was proposed:

H1: The proportion of Jordanian listed companies disclosing FI disclosure has increased significantly following the introduction of IFRS 7.

[5] Indeed, the extant literature has focused on financial reporting in general. Indeed, the present study provides the first comprehensive investigation into FI-related accounting standards in a developing country context. Moreover, prior studies in this area have concentrated on developed countries which have a different contextual background. In this respect, Cooke and Wallace (1990) and Belkaoui (1983) have argued that accounting is the product of its environment, so accounting policies and techniques are influenced by the contextual factors within a country. The extant literature has highlighted the crucial role played by the external environment on a country's accounting system (Cooke and Wallace, 1990). Studies in this area have identified a number of factors that can affect a country's accounting practices: namely, (i) the political and economic system; (ii) the legal system; (iii) the accounting profession; (iv) the taxation system; and (v) the culture of the nation (e.g. Mueller, 1967; Frank, 1979; Doupnik and Salter, 1995; Nobes, 1998; Gernon and Meek, 2001; Ashraf and Ghani, 2005; Mashayekhi and Mashayekh, 2008). Accordingly, the current study investigates the impact of the introduction of IFRS 7 on FI disclosure in a developing country (Jordan) which has its unique background that greatly differs from studies conducted in a developed market. Finally, previous studies in this area have emphasised the impact of FI disclosure on companies in the financial sector and overlooked firms in non-financial industries. The current study fills this gap by examining FI disclosure for both financial and non-financial firms.

Second, in order to investigate the impact of IFRS 7 on the level of FI disclosure supplied by Jordanian listed companies, the following hypothesis was designed:

H2: The level of FI disclosure has increased significantly following the introduction of IFRS 7 compared to information provided previously by Jordanian listed companies.

Third, to study the impact of IFRS 7 on the FI disclosure provided by the four sectors examined in the current thesis, the third hypothesis was developed

H3: There are significant differences in FI disclosures by Jordanian listed companies within and across sectors.

H4: The comparability of FI disclosure within and across sectors increased significantly after IFRS 7 was implemented.

In addition, previous studies about the impact of accounting regulated FI disclosure have provided empirical evidence that: (i) the level of corporate disclosure has enhanced the market value of the firm (Hassan and Mohd-Saleh, 2010); (ii) a higher level of disclosure matters when valuing companies (Tsalavoutas and Dionysiou, 2013); and (iii) users (mainly investors) are selective in their needs and they look at certain types of information when making decisions (Hassan et al., 2006a; Hassan and Mohd-Saleh, 2010; Song et al., 2010). Hence, to achieve the second objective of the current study, three additional hypotheses were developed. First, to examine the value relevance of FI disclosure provided by Jordanian listed companies, the following hypothesis was proposed:

H5: The level of FI disclosure is value relevant and can explain market value.

In order, to investigate whether or not a higher level of FI disclosure is value relevant, the fifth hypothesis was formulated:

H6: The relative value relevance of FI disclosure is higher for companies exhibiting higher levels of compliance with FI disclosure requirements.

Finally, to examine the value relevance of the sub-components of FI disclosure, the sixth hypothesis was proposed:

H7: There is a relationship between the components of FI disclosure and firms' market value.

1.5 The Contribution of the Study

The empirical findings reported in the current thesis relating to H1 - H6 contribute to our knowledge and understanding of any relationships which exist between the Jordanian stock market's perception of equity value and FI disclosure practices. In particular, the study makes a number of novel contributions to the extant literature. First, the study provides empirical evidence about the impact of IFRS 7 on FI disclosure as compared to that provided under IAS 30/32 for Jordanian listed companies. Specifically, evidence about the influence of IFRS 7 is provided in three areas, namely: (i) the proportion of Jordanian listed companies making FI disclosures; (ii) the level of FI disclosure provided; and (iii) the variations in FI disclosure practices within and across sectors. The results from this investigation should assist regulatory bodies such as the IASB when determining the level of compliance with its pronouncements in general, and compliance with the requirements of IFRS 7 in particular[6]. Thus, the IASB can assess the relevance of its standards to an emerging capital market such as Jordan by seeing whether companies comply with the disclosure requirements and examining whether investors appear to respond to mandatory disclosure which seeks to convey useful information. In addition, the evidence may help Jordanian policy makers in evaluating the extent to which Jordanian listed companies

[6] The main objective of the IASB is to produce high quality and enforceable accounting standards that are in the public interest throughout the world (IASB, 2006a, p. 12). Hence, any indication about how companies and users react to the IASB's standards should provide some feedback to standard-setters and national policy-makers about the relevance of such standards to a specific context. The main focus of the current study was to examine the impact of IFRS 7 on FI disclosure (FI-related items) provided by Jordanian listed companied and the issue of compliance was not within the scope of the current study.

comply with regulations on accounting standards which are mandated by Government legislation.

Second, the study provides empirical evidence of the positive impact of FI-related accounting standards on equity values in the Jordanian capital market. In particular, the current thesis has analysed the value relevance of FI disclosure pre- and post- the implementation of IFRS 7. The findings suggest that investors attach some importance to FI-related information when making investment decisions. In particular, those firms which disclose an above-average number of items of FI-related information tend to have higher share prices; there is a positive and significant correlation between these two variables. In addition, this positive association between FI information and equity values is stronger post- IFRS 7 and specific to *Balance Sheet*, *Risk* and *Fair Value* disclosures. This result provides some indication that FI reporting published by Jordanian listed companies is viewed as relevant by investors. Hence, this study offers an objective assessment of the current state of FI reporting among Jordanian listed companies for local, international and potential investors; specifically, FI reporting seems to be an important source of information for investors who want to make an economic judgment about risk and performance before investing in such companies. The current thesis supplies insights on this issue – especially on the question of risk. Specifically, the study suggests that risk-related information about the usage of FIs has become even more important since IFRS 7 was adopted.

Third, the study offers some insights for finance directors of Jordanian firms, who make decisions on the content of FI disclosures; they should glean valuable insights into how the FI information which their firms publish is perceived by investors and capitalised into share

prices. This knowledge of the market's perception about the level of a firm's FI disclosure and its impact on valuation can help the firm's managers to tailor the published FI information in a more targeted fashion at the type of data which is appropriate. Hence, FI information contained in the annual reports might be structured and disclosed in such a way as to positively impact on the market and be reflected in the value of the firm. In other words, the reporting of the FI information could be optimised in order to minimise any adverse perception of the firm's use of FIs by investors.

Fourth, the findings of the current study show a great deal of consistency with the results from investigations that have conducted in developed market countries (e.g. Barth et al., 1996); the findings suggest that emerging markets behave similarly to their developed market counterparts. The results of this thesis strengthen the notion that models concerning disclosures applicable in a developed market may also be appropriate in the context of an emerging stock market. Similarly, the current findings also support the general notion that studies which have been conducted in Western markets need to be replicated in other countries at a different stage of development with their varying economic and institutional contexts before conclusions can be arrived. The reason why the Jordanian response to IFRS 7 may have been similar to reactions to the standard in other developed countries could be because of the relatively open nature of the economy and the Government's attempts to attract foreign investors to purchase shares in Jordanian companies.

Finally, to the best of the researcher's knowledge, this study is the first specific investigation of FI reporting practices under IFRS 7 for Jordanian listed companies. Until now, no attempt has been made to examine the extent to which FI information published under IFRS 7 in the annual reports of Jordanian listed companies complied with the

requirements of the standard. In addition, no attempt has been made in previous Jordanian investigations to assess the value relevance of FI disclosures provided in financial statements produced under IFRS 7. Overall, this study provides a description of the current status of FI disclosure in Jordan; such a description may have implications for similar developing countries. This description should help to build a global picture about how standards are implemented and whether FI information supplied is useful outside of a Western context.

1.6 Structure of the Thesis

The remainder of the thesis is organised as follows. The next chapter provides background information about the historical development of Jordan and outlines the major factors affecting the development of the accounting system in the country. This chapter includes a discussion of the political and economic development of the country, the growth in the importance of the Jordanian capital market as well as changes to the legal system, the accounting profession, the taxation system and the culture of the country. Such a chapter will help to provide a context for the current investigation. In particular, the chapter will help to interpret any findings from the disclosure index results and understand any conclusions reached during the value relevance analysis of FI disclosure.

The extant relevant literature is reviewed in Chapter 3. This review emphasises a number of issues relating to the current investigation. In particular, the chapter surveys the literature in four main areas, namely: (i) the corporate usage of FIs; (ii) FI disclosure; (iii) risk disclosure associated with FIs; and (iv) the value relevance of FI disclosure. In addition, the chapter discusses the content of FI-related standards which have been issued by different accounting standard-setters e.g. FASB, IASB and ASB; the standards promulgated by the

FASB and the ASB are for information and most of the attention in this chapter is on IAS 30/32 as well as IFRS 7 which have been issued by the IASB.

Chapter 4 outlines the theoretical framework underpinning the current study. Specifically, decision usefulness theory was selected because of its suitability as a theoretical framework for the current study; justifications for the adoption of this theory are provided. The chapter also presents details of how the decision usefulness approach has been adopted by different accounting standard-setters including the IASB and the FASB. In addition, the chapter reviews the extant literature in the financial reporting area which has adopted the decision usefulness conceptual framework; this literature consists of studies in Behavioural Accounting Research (BAR) and Market Based Accounting Research (MBAR). Finally, the chapter outlines the limitations associated with this approach. An attempt is made to explain why the limitations should not impair the validity of any findings arrived at in the current study.

Chapter 5 discusses the research paradigm, methodology and methods employed. In particular, the current thesis uses a functionalist methodological approach to provide a framework for understanding the research topic; the researcher's world view is outlined and his philosophical assumptions are discussed. The chapter also outlines the research methods employed by the current study, namely: the disclosure index technique and the value relevance analysis.

Chapters 6 and 7 contain the main research findings of the current thesis. Chapter 6 outlines the results of the disclosure index analysis for the annual reports of 164 Jordanian listed companies before and after the implementation of IFRS 7. Specifically, the level of FI-

related information disclosed in the financial statements of Jordanian companies in 2006 under IAS 30/32 is compared with that provided in 2007 under IFRS 7. In addition, the chapter provides a discussion on the narrative details about FIs which companies' management provided pre- and post- the implementation of IFRS 7 in their financial statements. Chapter 7 presents the results from an examination of the value relevance (usefulness) of FI disclosure provided over the two periods; this examination was conducted for both the percentage of the overall FI-related information and the sub-categories of FIs.

The final chapter summarises the key findings of the current study. It also outlines the main limitations of the work, and suggests avenues for future research that could be undertaken based on the empirical work conducted in the current study. Conclusions are arrived at in this chapter based upon all of the findings which are uncovered.

1.7 Conclusion

This chapter has set the scene for the remainder of this thesis; it has provided a platform to guide the reader and supplied an understanding of why this research was conducted. It has outlined the broad areas covered within the thesis and the objectives of the research. In particular, the chapter has highlighted the research hypotheses proposed by the current study which focuses on: (i) the impact of IFRS 7 on FI disclosure provided in the annual reports as compared to that provided beforehand; and (ii) the value relevance of FI disclosure provided under IFRS 7 as compared to that provided under IAS 30/32. The chapter has also outlined the main contribution made by the current study. Finally, the chapter has described the structure of the thesis in Section 1.6.

Chapter Two

The Accounting Environment in Jordan

2.1 Introduction

The primary aim of this chapter is to explore the origin, growth and development of accounting regulation and practice in Jordan. This aim is achieved by outlining a historical review of the development of accounting regulation in Jordan as well as the factors that have affected this development within the country. A comprehensive review of the relevant regulation is therefore provided together with a discussion of how such legislation has influenced financial reporting practices in Jordan. This legislation comprises various Company Acts, a number of Securities Acts, Tax Acts, Accounting Profession Acts, and other governance processes. Cooke and Wallace (1990) and Belkaoui (1983) have argued that accounting is the product of its environment, so accounting policies and techniques are influenced by the contextual factors within a country. Based upon this argument, the current chapter details the principal factors that have influenced the accounting system in Jordan namely: political and economic factors, the legal system, the accounting profession, the taxation system, and culture. The remainder of this chapter is structured as follows. A general background about Jordan is outlined in Section 2.2. Section 2.3 provides a historical investigation on the development of accounting regulation in Jordan. Section 2.4 details the key influences on the accounting system in Jordan. Finally, a conclusion to the chapter is outlined in Section 2.5.

2.2 General Background about Jordan

Jordan is one of the youngest countries in the Middle East; it was part of the Ottoman Empire until the second decade of the 20th century (Omar and Simon, 2011). In 1921, the British government declared Jordan a semi-independent political entity which was then termed 'Transjordan' (Btoush, 2009). The country remained under mandated British

control until 1946 when it acquired its independence and became a Kingdom (Piro, 1998). Following an Arab agreement in 1950, the Kingdom of Transjordan and the West Bank (part of the Palestine State) were united under the name of 'The Hashemite Kingdom of Jordan[7] **(**Brand, 1995**)**.

Over the past six decades or so, the Middle East area including Jordan witnessed several conflicts and wars, namely: the Arab-Israel wars (1948-1967), the Gulf crises in 1990 and the Iraq war in 2003 (Omar, 2007). As a result, there was a large migration of refugees to the East Bank of Jordan (Department of Statistics, 2009). The turmoil associated with the migration has been one of the key influences on the development of Jordan over the last 60 years (Al-Akra et al., 2009)[8]. Subsequently, the population of Jordan has increased significantly over the last few decades; indeed, since the Kingdom was established it has grown roughly by a factor of ten (Department of Statistics, 2009). The first census in Jordan was carried out in 1961 when the population totaled 0.9 million (Department of Statistics, 2009). Indeed, the Arab-Israeli wars in 1948 and 1967, which led to the Israeli occupation of the West Bank and the Gaza Strip, resulted in a large number of Palestinian people moving to the East Bank of Jordan (Suwadian, 1997). In addition, the Gulf crisis which started in 1990 contributed to a significant growth in the population of Jordan[9] (Omar, 2007). Accordingly, the population in Jordan increased to 2.2 million in 1979, before hitting 4.4 million in 1994. The population growth averaged 4.8% during the period

[7]In 1950, following the enactment of a series of preparatory administrative measures as well as Arab countries' consensus, Jordan's King Abdullah I annexed the part of central Palestine (now known as the West Bank, which had not fallen to Israeli forces during the war). This extension of Jordanian citizenship to all West Bank Palestinians (440,000 of them indigenous and 280,000 refugees from other areas of Palestine that became Israel) as well as to the 70,000 who went directly to the East Bank laid the formal political basis for the "unity of the two banks." (Brand, 1995, p. 47)

[8] These influences are discussed in more detail in the following sections of this chapter.

[9] The Arab-Israel wars resulted in 600,000 Palestinian immigrants moving to Jordan while the Gulf crisis in 1990 resulted in 600,000 Jordanian passport holders returning to Jordan (Suwadian, 1997; Omar, 2007).

1961-1979 and 4.4% between 1980 and 1994 (Department of Statistics, 2009). By the end of 2005, the population increased to 5.4 million mainly due to an influx of refugees from the Gulf war in 2003 (Omar, 2007). In addition, the recent turmoil in Iraq has led to a new wave of migration to Jordan which has increasing the population to 6.0 million in 2010 (Al-Omari, 2010).

Jordan is situated geographically in the southern part of the Middle East in a strategic location between Europe, Africa and Asia (Hutaibat, 2005). In recent years, the country has had a relatively secure and stable political as well as economic system in comparison to some of its neighbours (Al-Omari et al., 2007). It is surrounded by four countries (Saudi Arabia, Iraq, Syria, and Israel) and occupies approximately 89,000 square kilometres. Administratively, the State of Jordan comprises 12 provinces which in turn are grouped into three main territories[10]. Amman, the capital, is the biggest city and is located in the centre of the Kingdom.

2.3 Historical Perspective on the Development of Accounting Regulation in Jordan

Mashayekhi and Mashayekh (2008) argued that although rudimentary accounting practices were in place for centuries, formal accounting was not well-developed until 1494 when Luca Pacioli, a Franciscan friar, codified and explained the double-entry system. In Jordan, prior to independence, commercial matters in "the Emirate of Transjordan" were enforced by the enactment of the Ottoman Empire which was called the "Civil and Commercial Code of 1850" (Sharar, 2007). According to this legislation, accounting practices in the

[10] Territories are: (i) the North territory which includes four cities: Irbid, Jarash, Ajloun and Mafraq; (ii) the Central territory which comprises four cities: Amman, Zarka, Salt and Madba; and (iii) the South territory which consist of four cities: Ma'an, Karak, Tafelah and Aqaba.

country followed those applied by the Ottoman Empire[11] (Al-Akra et al., 2009). In the early 1930s, the Ottoman Empire adopted the double-entry system (Guvemli and Guvemli, 2006); hence, this system was applied for accounting practices in Jordan adhering to the Ottoman Empire rules.

In 1964, the first published legislation in Jordan was issued - the Company law of 1964 - which replaced the Ottoman Empire's Act (Marashdeh, 1996). Indeed, Haddad (2005) argued that this Act was the first step towards organising companies' affairs and governing accounting and financial reporting practices in Jordan. The Act concentrated on general disclosure requirements which highlighted the Board of Directors' responsibility; specifically, it stated that (i) companies should publish a balance sheet and profit and loss account within the first three months of their fiscal year (Article 115); (ii) auditors should ensure that the financial information provided fairly reflects the situation of the company and is prepared in accordance with Generally Accepted Accounting Principles (GAAP) (Article 170); and (iii) two types of companies were identified including partnerships and limited shareholding companies (Article 183).

Even though this Act organised accounting and disclosure requirements for companies, it was very limited in scope and relatively silent on enforcement matters (Suwaidan, 1997; Naser, 1998); although it required companies to prepare their financial statements in accordance with GAAP, it neither specified any requirements about the contents of the balance sheet and profit and loss account nor defined the GAAP to be used (Omar, 2007).

[11] The Ottoman Empire used the ladder method as an accounting approach; this method was used in the period between 1250 and 1922 for keeping records of the Empire's income and expenditure as well as the records of foundations and similar private organisations (Guvemli and Guvemli, 2006).

This led the government to refine existing legislation and introduce new rules in order to increase the transparency and liquidity of the capital market. Sharar (2007) argued that economic and political developments in the country during the 1970s and 1980s which increased considerably the level of business activity and foreign direct investment motivated the Jordanian jurisdiction to introduce more developed business laws.

In 1989, the government introduced the Company Act No. 1 which provided more comprehensive, detailed and clearer directions than previous regulations (Haddad, 2005). It identified a wide range of companies which were subject to the Act's provisions[12]. In addition, the Act explained in greater detail important issues associated with public shareholding companies including the formation of public shareholding firms, capital adequacy rules, and disclosure requirements (Al-Omari and Salimi, 2000). In the area of disclosure requirements, several articles within the Act set out the information which companies were obliged to publish. For example, Article 168 stated that the Board of Directors should publish, within the first three months of their financial year (i) a balance sheet and profit and loss account, with comparative figures for the previous year; companies should publish these statements in a newspaper within two months prior to a General Assembly; (ii) the directors' report which was to include a brief summary of the financial position of the firm; and (iii) the auditors' report.

Further, Article 170 of this Act indicated that these documents should be enclosed with an official invitation and sent to shareholders at least 14 days prior to a General Assembly. A copy of these documents had to be sent to the Companies Controller, the stock exchange,

[12] These included partnerships, limited partnerships, private limited companies, partnerships limited by shares and public shareholding companies (Article 6).

the auditors, and the Income Tax Department of the State at least 21 days prior to this General Assembly. What is more, Article 172 of the Act specified that the Board of Directors should send an interim report every six months to the Companies Controller and Amman Financial Market outlining the financial position and operating results of the company.

Finally, Article 221 provided that every public shareholding company must appoint an external independent auditor. An external auditor should prepare a report to be discussed in the General Assembly. In this respect, Articles 223 and 225 expand on the content of this report. Specifically, the auditors' report should address the following points: (i) whether they have obtained all the information and the explanations necessary to examine the financial records of a company in accordance with Internationally Accepted Auditing Standards; (ii) whether the company's accounts and financial records are adequate and maintained in a satisfactory manner; (iii) whether the balance sheet, profit and loss account and the statement of resources and application of funds fairly present a company's financial position and comply with GAAP; (iv) whether the financial matters highlighted by the Directors in their report are in accordance with the company's records; (v) whether there have been any violations by the company and its directors of the provisions of the Act and the extent to which any violation has had an impact on the company's financial position and its results or operations; and (vi) any other information or remarks which the auditor considers that the company's shareholders should know.

The Company Act No. 1 of 1989 provided more comprehensive, detailed and clearer directions as compared to its predecessor (Company Act of 1964); it specified the content

of financial statements and the responsibilities of the Board of Directors; it also mandated the wording of the audit report (Haddad, 2005). However, the Act did not define which GAAP shall be used by companies in the preparation of their financial statements (Abu-Nassar and Rutherford, 1996). As a result of this flexibility in requirements, Jordanian firms were largely influenced by US and UK firms in terms of the preparation of financial statements (Abu-Nassar, 1993). This reflected the role of accounting students who pursued their postgraduate studies in the US and the UK before returning to accounting practices in Jordan (El-Issa, 1984).

Thus, it could be argued that accounting practice in Jordan was still underdeveloped at this time. Indeed, Al-Akra et al. (2009) noted that prior to the 1990s, there was no legal framework underpinning accounting and auditing standard-setting in the country. The authors suggested that: (i) the process of regulating accounting practice depended upon government legislation with minor advisory input from the Jordan Association of Certified Public Accountants (JACPA); and (ii) there were no specific disclosure requirements for public financial information.

In order to strengthen the business environment, protect investors, improve disclosure rules, and enhance the overall economic reform programme, the government enacted a number of vital economic laws; namely the Company Act No. 22 in 1997 and the Temporary Securities Act No. 23 of 1997 (Al-Omari, 2010). The Company Act No. 22 of 1997 reinforced provisions which had been set out in the two previous Company Acts of 1964 and 1989 (namely the responsibilities of the Board of Directors, the need for a balance sheet and profit and loss account, and the role of the Audit report). However, it went

further; it dealt with a number of new issues. For example, it specified that all public shareholding companies should organise their accounts and keep their books in accordance with accounting standards (Al-Omar and Salimi, 2000). For the first time, this Act defined these accounting standards as the IASs issued by the IASB; specifically, it required all listed entities to apply IAS/IFRS[13] (Omar, 2007).

One of the most important actions which the government took in order to create a fair, transparent and efficient market was the introduction of the Temporary Securities Act No. 23 in 1997 which included directives that dealt with disclosure and measurement issues (Al-Akra et al., 2009). In keeping with Company Act No. 22 of 1997, it required all entities to fully comply with IAS/IFRS requirements in the preparation of their annual reports; it required companies to provide audited annual reports to the Jordan Securities Commission (JSC) (Article 14). In addition, it stated that those companies that did not comply with IAS/IFRS and other related enactments would be penalised by the Amman Stock Exchange (ASE); the sanction could include a financial penalty and/or a delisting.

Importantly, this Act provided for the set up of three important institutions: (i) the ASE which is in charge of several functions such as listing enterprises on the exchange, monitoring and regulating market trading, ensuring a fair market, investor protection, the provision of timely and accurate information, and the dissemination of market information to the public; (ii) the Securities Depository Centre which is responsible for the safe custody of securities ownership, registering and transferring the ownership of securities, and settling prices among brokers; and (iii) the JSC which is entrusted with developing the capital

[13] In addition, it dealt with contemporary issues such as foreign companies and mutual funds, consolidated financial statements of holding companies, provisions for associated companies, and joint venture investment companies (Article No. 184).

market in accordance with international standards to ensure fairness in transactions in order to attract domestic and foreign investors into the Jordanian capital market (ASE, 2008a).

Finally, both the Company Act No. 22 and Temporary Securities Act No. 23 of 1997 provided the first guidelines on the corporate governance structure of Jordanian listed companies; they sought to protect the rights of shareholders and highlight responsibilities of the Board of Directors (Hutaibat, 2005). Furthermore, these Acts mandated that all public shareholding firms should have an audit committee consisting of three non-executives; it required this committee to meet at least four times a year in order to examine and discuss the firm's internal control mechanisms including the work of both external and internal auditors (ROSC, 2004). This committee also had responsibility for monitoring compliance with the requirements of the Company and Securities Acts.

2.4 The Main Factors Affecting the Accounting System in Jordan

Roberts et al. (2005) argued that no two countries have identical accounting systems. The extant literature has highlighted the crucial role played by the external environment on a country's accounting system (Cooke and Wallace, 1990). Mueller (1968) suggested that the stage of economic development, type of economy, growth pattern of the economy and culture can affect a country's accounting practices. In particular, Doupnik and Salter (1995) argued that the stage of development affects the type of business transactions conducted in a country and the type of economy determines which transactions are more prevalent. A number of studies have investigated the factors that can affect the development of an accounting system (e.g. Mueller, 1967; Da Costa et al., 1978; Frank, 1979; Nair and Frank, 1980; Doupnik, 1987; Gray, 1988; Meek and Saudagaran, 1990; Doupnik and Salter, 1995; Nobes, 1998; Gernon and Meek, 2001; Ashraf and Ghani, 2005; Mashayekhi and

Mashayekh, 2008). These studies identified a number of factors that can affect a country's accounting practices, namely (i) the political and economic system; (ii) the legal system; (iii) the accounting profession; (iv) the taxation system; and (v) culture. In a similar vein, the current thesis relates the evolution of Jordan's accounting practices to such factors in order to explain how accounting practices in Jordan developed and what factors contributed to this advancement. This analysis provides a great deal of insight into the development of the accounting system in Jordan and offers a strong base for this study; the current study investigates FIs disclosure and its value relevance for Jordanian listed companies based on the requirements of IFRS GAAP[14].

2.4.1 Political and Economic Development

Roberts et al. (2005) argued that the political and economic system is one of the most important determinants of accounting regulation and practice. In particular, they argued that what is important to accounting is how a country organises its political and economic relations. In Jordan, the political system can be characterised as a constitutional monarchy (Lust-Okar, 2001). The legislative power is vested in the King and the national assembly; the national assembly consists of a Senate which is appointed by the King and the House of Representatives which is elected by the population (Al-Shiab, 2003). Given (i) the very limited natural resources with which Jordan is endowed; and (ii) the conflict between Arab countries and Israel over the six decades, there have been a number of adverse influences on the structure of the political and economic system in Jordan which in turn affected the development of accounting system of the country (Haddad, 2005).

[14] Accounting practices in Jordan went through several stages of development which ultimately ended with the adoption of IFRS GAAP in 1997.

Economically, Jordan went through an intense financial crisis and experienced economic setbacks as a result of conflicts in neighbouring countries, namely (i) the Israeli invasion of the Palestine State in 1948; (ii) the Arab-Israel wars in 1967 and 1973; (iii) the Gulf crisis in 1990; and (iv) Gulf war in 2003 (Al-Omari, 2010). These conflicts have had a negative effect on the economic environment over the last six decades. Table 2.1 provides a summary of the impact of the Gulf crisis on the Jordanian economy in the early 1990s. The table highlights that the Jordanian economy was affected in a number of ways by the conflict. For example, an inspection of this table reveals that GDP growth declined by 8% in 1990 and 7.3% in 1991. Exports (especially to Iraq and Kuwait) fell by $23.9 million in 1990, $138.8 million in 1991 and $160.0 million in 1992. On the other hand, imports dramatically rose from $293.3 million in 1990 to $715.0 in 1992. In addition, tourism revenue collapsed because a lot of people stopped visiting the country; it decreased by $90.7 million in 1990 and $266.5 million in 1991. Furthermore, refugees from the conflicts needed financial support while debt repayment from Iraq ceased; not surprisingly, a recession ensued (Khasharmeh, 1995). In addition, unemployment and the rate of inflation increased sharply mainly due to the return of Jordanians who had been working in Gulf Corporation Countries (GCC); this resulted in an increase in poverty within the country (Al-Htaybat, 2005).

Table 2.1: The Economic Impact of the Gulf Crisis on the Jordanian Economy (Estimated loss in millions of US $)

Influences	1990	1991	1992
Exports to Iraq and Kuwait (decrease)	23.9	138.9	160.0
Exports to other countries (decrease)	127.8	302.9	318.0
Remittances from Jordanians working in Kuwait (decrease)	59.2	146.5	236.1
Increase in import bill	293.3	704.0	715.0
Increase in transportation and insurance premiums	140.3	120.8	115.9
Loss in transit business	98.7	236.7	227.2
Loss in tourism income	90.7	266.5	126.8
Loss in budget support from Arab countries	138.3	371.6	371.6
Loss of repayment of Iraqi's debt	160.0	160.0	160.0
Total losses	1132.2	2447.9	2430.6
Unemployment rate	16.8	18.82	15.1
Inflation rate	21.6	12.7	6.7
Poverty rate	22.0	33.0	27.9
Real GDP growth rate	-8.0	-7.3	4.6

Notes: This table shows the economic impact of the Gulf crisis on the Jordanian economy. Source: Marashdeh (1996)

In order to fuel economic growth and attract foreign investment into the country, the government moved towards a free market economy[15]. Brand (1999) argued that the Jordanian political and economic system experienced major developments over the last century. In this respect, Piro (1998) studied how internal decisions by the Government throughout the history of Jordan have led to the current free-market approach. Specifically, he examined the political economy in Jordan from the early 20th century until the 21st century. He divided this time into several phases based on the impact of political changes on the economic development of Jordan.

[15] For instance, the government established the Stock exchange in 1975, launched a privatisation programme in 1990 and initiated tax-free zones in the 1990s (Al-Akra et al., 2009).

The first phase covered the period before 1921. During this time, the area of Transjordan was part of the Ottoman Empire (Khasharmeh, 1995). The population of the country was located in five main cities, namely: Ajloun, Irbid, Kerak, Amman, and Salt - the Ottoman Empire capital (Piro, 1998). The principal outputs of the Transjordan economy were agricultural products such as wheat, barley, vegetables and beans (Zaid, 2000). Some other industries such as leather and iron goods also existed but their contribution to GDP and employment was relatively small (Hutaibat, 2005). At that time, accounting practices were not developed in the Transjordan area. Nevertheless, as a part of the Ottoman Empire, some accounting procedures did exist in order to allow the Muslim population to comply with Islamic Sharae'ah rules (Abu-Baker, 1995). These procedures began to develop as the Ottoman Empire followed the double-entry system of bookkeeping in the early 1930s (Zaid, 2004). However, financial reporting remained relatively undeveloped since there was no large commercial sector which needed to record and document transactions (Abu-Nassar, 1993).

According to Piro (1998), the second phase in the economic development of the country occurred between 1921 and 1946. This period coincided with a number of major events which had a direct bearing on the formation of the State in Transjordan as a British colony (Peake, 1958). These events included: (i) the establishment of an administrative bureaucracy by the colonial authorities; (ii) the establishment of a modern army; and (iii) the integration of the existing nomadic people into a sedentary society through land settlement (Peake, 1958). Thus, the Emirate of Transjordan was established in March 1921 under British authority (Al-Kheder et al., 2009). Indeed, Transjordan was under the general supervision of the British commissioner of Palestine, with King Abdullah I installed as

national leader and head of the local government council of ministers. Nevertheless, during the 1920s the political system in Transjordan was considered weak; Piro (1998) suggested that the State lacked any true national identity; tribal loyalty underpinned the population's allegiance. Moreover, there was no move towards industrialisation and exploitation of the existing agriculture sector. As a result, British aid became Transjordan's main economic lifeline[16].

Economically, the State was relatively underdeveloped. For example, the Emirate of Transjordan had a small private sector engaged in the production of local crafts and farming (Muhafaza, 1973). Specifically, industry was limited to handicrafts, tailoring and the production of embroidered goods. In this respect, Marashdeh (1996) argued that Transjordan lacked most of the prerequisites for industrialisation because of an insignificant industrial production base – that is, the dearth of natural resources and a small labour market. This led the British authority to take the lead in order to exploit the scarce natural resources of the State. Therefore, in 1928, an agreement was signed with Britain on the administration of resources from the State[17] (Muhafaza, 1973**)**. As a result, economic activity within the country started to increase. This economic development was matched by significant political advances during the 1940s which ultimately led to the independence of the country in 1946 (Al-Omari and Salimi, 2000). Accounting practices in this period were still very limited although some minor improvements were introduced by the British and other Western firms which started businesses in Transjordan (Al-Kheder et al., 2009).

[16] The total British ffinancial aid for Transjordan in the 1930s and 1940s amounted to $6.9 billion (Khairy, 1984).

[17]This resulted in the discovering of important natural resources such as phosphates and potash which represented the main resources of the State until now. Currently, Phosphate Company and Potash Company are among the more profitable firms listed on the Jordanian capital market (Muhafaza, 1973).

Piro (1998) argued that the third phase of the economic development of the country started when the Emirate of Transjordan gained independence and was renamed 'The Hashemite Kingdom of Jordan' in 1946. This political development coincided with a period of unrest within the region (Akroush and Khatib, 2009). From 1946 onwards, the Middle East area witnessed a significant amount of turmoil which had a sizeable impact on Jordan (Lust-Okar, 2001). For example, the first Arab-Israeli war in 1948 resulted in a large wave of Palestinian refugees (approximately 600,000 in total) which tripled the population of Jordan and increased the number of economic and social obstacles which the economy of the country faced; it led to a significant increase in unemployment and a rise in inflation as a larger number of people sought to purchase the same goods and services which were available (Berry, 1987). In addition, a second Arab-Israeli war in 1967 resulted in another wave of Palestinian refugees; this time, around 100,000 immigrants arrived (Zaid, 2000). One positive benefit from this development was that the influx of Palestinian refugees included a large number of artisans with a substantial amount of liquid assets which contributed to the growth of the middle class within the Kingdom (Marashdeh, 1996).

In the years between 1970 and 1980, Jordan experienced a period of sustained growth in terms of its GDP which increased, on average, by over 4.0% per annum (Piro, 1998). This growth in the Jordanian economy was possibly due to the liberalisation of foreign investment regulations and the enactments of reform legislation[18] within the Kingdom (Sharar, 2007). In addition, Jordan sought to establish itself as the location of choice for foreign investors and attract those firms which were adversely affected by the Lebanese Civil War in 1972; foreign investors who had previously worked in Lebanon were

[18] These enactments included the Encouragement of Investment Law (1972), the Registration of Foreign Companies Law (1975), and the Control of Foreign Business Activities Defence Regulations (1978).

encouraged to set up operations within Jordan[19] (Naser, 1998). Moreover, the establishment of the Jordanian Financial Market in 1976 played a vital role in attracting new foreign investment into the country (Marashdeh, 1996).

Table 2.2 illustrates key indicators of the Jordanian economy over the last twenty years. An analysis of this table shows that the real growth of GDP has increased significantly, peaking in the 1990s at an average of 9.2% per year; this was mainly due to a privatisation programme which was launched by the government in 1990. In the period between 2000 and 2008, the Jordanian economy maintained high levels of GDP growth averaging over 6.0% before falling to 2.8% in 2009 due to the current financial crisis. However, despite these changes, Jordan still ran a trade deficit with imports at least double the value of exports (see Table 2.2). Indeed, this table highlights that although exports have increased, imports have risen at a faster rate and the trade deficit has continued to widen; it peaked at $11.5 billion in the 1990s before falling to $2.8 billion between 2000 and 2005. In recent years, the deficit figure has remained constant around $6 billion.

In terms of general prices in the country, Table 2.2 reveals that prior to 2005, inflation was at low levels of around 2.0% on average before increasing to 14.9% in 2008. Since 2008, inflationary pressures have waned due to a drop in the prices of primary commodities throughout global markets (Central Bank of Jordan, 2010a). In fact, the annual rate of inflation amounted to only - 0.7% in 2009 compared to 13.9% in 2008. The current account balance of the country has shown very disappointing numbers since 1990. This is mainly due to the dearth of natural resources within the country; instead, Jordan depends

[19] Prior to the Lebanese Civil War, Beirut (the capital) was the main destination of foreign investment in the Middle East.

essentially on external grants and foreign aid (see Table 2.2). However, the central bank's foreign currency reserves have grown over the past two decades. Table 2.2 shows that foreign currency reserves stood at $3.8 billion between 2000 and 2005, and have continued to increase reaching over $11 billion in 2010[20]. As the country depends mainly on external aid, the government's revenue and debt has continued to record constant figures.

[20] This is mainly due to (i) the privatisation programme which generated and attracted a large amount of foreign investment; (ii) the establishment of the ASE; and (iii) reform in the country's relations with the US and GCC which has resulted in the receipt of large and continuous grants.

Table 2.2: Key Economic Indicators for the Jordanian Economy

Indicator	1990-2000*	2000-2005*	2006	2007	2008	2009	2010
Real GDP growth (annual change, %)	9.2	6.0	8.0	8.9	7.8	2.8	4.1
Imports (US $ Billion)	12.2	7.7	13.2	15.7	19.2	16.3	17.9
Exports (US $ Billion)	0.7	4.9	8.1	9.3	12.4	10.9	11.9
Trade Deficit (US $ Billion)	11.5	2.8	5.1	6.4	6.8	5.4	6.0
Inflation (annual change, %)	NA	2.1	6.3	5.4	14.9	-0.7	5.3
Current Account Balance (US $ Billion)	NA	-0.1	-1.7	-3.0	-2.2	-1.3	-2.2
Current Account Balance (% of GDP)	NA	0.0	-11.6	-17.6	-10.3	-5.9	-8.9
Total Official Reserve (US $ Billion)	NA	3.8	6.2	9.6	7.7	11.1	11.8
Total Government Revenue excluding grantS (% of GDP)	NA	25.5	29.7	29.7	26.4	25.6	24.5
Total Government Debt (% of GDP)	NA	95.4	77.4	74.2	62.3	66.1	67.1
Total Gross External Debt (% of GDP)	NA	73.0	49.3	43.6	24.3	23.4	20.7

Notes: This table reports the key economic indicators for the Jordanian economy. Source: Department of Statistics, Jordan, 2009 and Regional Economic Outlook, IMF, 2010. * Year Average, NA indicates not available.

Developments in the political and economic system can be expected to cause major changes in the accounting practices of the country (Ashraf and Ghani, 2005). With respect to Jordan, even though the country experienced considerable political and economic developments since it was established in 1921, the surrounding unfavourable conditions (e.g. wars and crises) were not helpful to develop the country (Al-Omari et al., 2000). Therefore, Accounting practices in this period, as a part of the economic system of the country, were not well-developed until 1997 when the Government decided to adopt the IAS/IFRS. This adoption of IAS was mainly due to a variety of referendums introduced by the Government, namely (i) the establishment of the Amman Stock Exchange (ASE); (ii) the launch of the privatisation programme; and (iii) the enactment of several business laws (ASE, 2008a). These reforms played a very important role in the development of accounting regulation and practice.

2.4.2 The Jordanian Capital Market

In the early 1930s, the Jordanian economy started to expand and trading as well as marketing activities began to increase (Haddad, 2005). One of the biggest banks in the Middle East (the Arab Bank) was established in Jordan to facilitate this expansion (Helles, 1992). This development was followed by the launch of several other companies such as Jordan Tobacco in 1931, Jordan Electric in 1938 and the Jordan Cement Factories in 1951 (ASE, 2008b). In 1975, following a comprehensive investigation by the Central Bank of Jordan and in cooperation with the World Bank's International Finance Corporation, the government announced the establishment of a capital market in Jordan which was to be called the Amman Financial Market (Akroush and Khatib, 2009). It was established as a public financial institution with legal, administrative and financial independence from the

government (ASE, 2008b). The Amman Financial Market Law No. 31 of 1976 set out the main objectives of the capital market. These objectives were to (i) attract and encourage savings for investment in securities in order to satisfy the funding needs of the national economy; (ii) organise the issue of and dealing in securities in order to ensure that transactions occurred in a quick and easy manner; (iii) protect the rights of small savers; and (iv) establish a market database in order to develop and achieve the market's objectives (ASE, 2008a). However, the market did not commence trading until January 1978; on that date, 51 companies were listed with a market capitalisation of $406 million (Alsharairi and Al-Abdullah, 2008).

As part of its comprehensive plan to reform the Jordanian economy (especially the capital market) and to boost the private sector by improving the regulation of the securities market, the government issued the Temporary Securities Act No. 23 of 1997 (Jordan Securities Commission, 1997). This Act was considered a landmark in the development of the Jordanian capital market. The main feature of this Act was the separation of the supervisory and legislative role from the executive role of the capital market (Al-Akra et al., 2009). As discussed in Section 2.3, this Act provided for the establishment of three new independent bodies; the Amman Stock Exchange (ASE) was the most important among them.

The ASE[21] was established in March 1999 as a result of restructuring the capital market (Al-Omari, 2010). This body was established by law as a private, nonprofit-making organisation with legal and financial independence (ROSC, 2004). The ASE is committed

[21] The ASE is entrusted, in conjunction with the JSC, to ensure compliance with legislation, a fair market and investor protection. Financial reporting rules are part of this legislation framework; for example, all Jordanian listed companies should provide the ASE with a copy of their annual reports within three months following the end of the financial year.

to the principles of fairness, transparency, efficiency and liquidity (ASE, 2008a). The major tasks of the ASE include: (i) the provision of a secure environment for the trading of listed securities and the protection of investor rights; (ii) the development of a transparent and efficient market; (iii) providing enterprises with a means for raising capital by listing on the exchange; (iv) the provision of modern facilities and effective equipment for recoding trades and the publication of prices; (v) the monitoring and regulating of market trading, in conjunction with the JSC, to ensure compliance with legislation, a fair market and investor protection; (vi) the development and enforcement of a professional code of ethics among members and staff; and (vii) the provision of timely and accurate information by issuers to the market and the dissemination of market information to the public (ASE, 2008a). Table 2.3 shows key statistics of the Jordanian capital market. The table reveals that the number of Jordanian listed firms has increased gradually over the past three decades reaching around 270 in 2010. Currently, listed firms are drawn from a wide range of industrial sectors including three main sectors: financial, services and manufacturing[22]. A visual inspection of the table reveals that market capitalisation and trading volume have risen considerably from $1,314 million and $95 million in 1985 to $4,943 million and $416 million in 2000 before increasing to around $30,000 million and $14,000 million respectively in recent years. Moreover, other financial indicators of the ASE are reported in Table 2.3. For example, while P/E and P/BV ratios have gradually increased over the years peaking in 2005 at 44.2% and 3.2%, dividend yield and EPS have remained constant at $0.2 and $0.5, respectively.

[22]From 2005 onwards, the Jordanian capital market adopted an international approach to categorising sectors which resulted in three main industrial categories. These categories are (i) the financial sector which includes four sub-sectors: banking, insurance, financial services and real estate; (ii) the service sector which includes eight sub-sectors: energy and utilities, education, telecommunication, healthcare, commercial services, media, transportation and tourism; and (iii) the industrial sector which includes eleven sub-sectors: pharmaceutical and medical, chemical, paper and cardboard, printing and packaging, food and beverage, tobacco, mining and extractive, electrical industries, engineering and construction, glass and ceramic, and clothing (ASE, 2008a).

Table 2.3: Key Statistics of the Amman Stock Exchange

Indicators	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
No. of listed companies	152	163	161	158	161	192	201	227	245	262	272	277
Market capitalisation (US$ million)	5827	4943	6316	7087	10963	18383	37639	29729	41216	35847	31200	29800
Book value (US $ billion)	4.5	4.9	5.3	5.9	6.3	7.8	10.4	14.3	16.0	18.0	193	NA
Trading Value (US $ million)	548	416	930	1330	2600	5320	23800	20000	17420	28000	13800	10000
Turnover ratio (%)	19.1	11.5	20.3	26.5	49.1	58.1	94.0	101.0	91.2	91.5	91.3	102.0
P/E ratio	14.3	14.8	15.3	12.9	21.7	31.1	44.2	16.7	27.9	18.8	14.3	26.3
P/BV ratio	1.5	1.2	1.4	1.2	1.8	2.7	3.2	2.9	2.9	2.2	1.8	1.7
Dividend Yield (%)	2.9	3.6	2.7	3.2	2.4	1.7	1.7	2.3	1.8	2.5	2.8	2.7
EPS (US $)	0.25	0.16	0.25	0.22	0.21	0.33	0.56	0.30	0.32	0.32	0.16	0.13

Notes: This table provides key statistics about the Jordanian capital market, the ASE. Source: ASE (2011). NA indicates not available.

2.4.3 Privatisation Programme

The Jordanian economy experienced a period of prosperity between 1975 and 1989 due to a sizeable increase in foreign investment and aid from oil-rich Arab countries as well as the US[23] (Al-Akra and Ali, 2012). In addition, the political stability within the country aided the business environment (Alsharairi and Al-Abdullah, 2008). However, in the late 1980s Jordan's economy faced a number of major difficulties. For example, from 1988 the economic support provided by rich Arab countries decreased sharply; this led to a recession in 1988/89 and the economy shrank[24] (Marashdeh, 1996). This economic decline led to a devaluation of the Jordanian Dinar by 50% (Piro, 1998). Moreover, the start of the Gulf crisis in 1990 led to the return of a large number of Jordanians who had been working in the GCC; this increased unemployment and pushed inflation higher; in fact, both climbed to 18% (Haddad, 2005). In addition, Jordan suffered because of its support for the Iraqi regime which resulted in the US and other Arab countries cutting off their financial aid (Marashdeh, 1996).

This reduction in external financial aid meant that the government was unable to meet its debt obligations (Al-Akra et al., 2009). In order to overcome this difficulty, the government entered into a number of international and national agreements: (i) they signed an agreement with the International Monetary Fund to pursue an economic reform programme; (ii) they signed a peace treaty with Israel in 1993; (iii) they signed a commercial agreement with the US in 1998; (iv) they established a number of Qualifying

[23]In particular, foreign investments in the Jordanian capital market ranged between 40% and 50% over the last 15 years as compared to a very small proportion before that time (ASE, 2012)

[24]The sharp decrease in the external financial support for Jordanian government led to an increase in the total budget deficit. This resulted in the government being unable to satisfy their external debts which resulted in the recourse to IMF. Consequently, this enforced the government to adopt intense economic policies which led to an increase in the unemployment and inflation (Marashdeh, 1996).

Industrial Zones to attract foreign investment to the country[25]; and (v) they joined the World Trade Organisation in 2000 which led to an improvement in relations with the US and the GCC (ASE, 2008b).

Thus, the Jordanian government agreed to implement a reform programme in order to establish a more open market economy (Executive Privatisation Unit, 2007); privatisation was part of the overall economic package that the government adopted in the early 1990s[26] as part of this reform process (Mardini, 2012). In addition, this reform programme was substantially enhanced by new economic developments that were taking place globally in terms of an increase in competitiveness, a lifting of customs and administrative barriers and increased capital flows (Alsharairi and Al-Abdullah, 2008).

In order to implement a well organised privatisation programme, the government set up a special body called the Executive Privatisation Unit in 1996; this body was responsible for overseeing privatisation within the Kingdom (Executive Privatisation Unit, 2007). In addition, the government introduced a legislative framework to underpin the privatisation process in 2000 (Al-Omari et al., 2010). Specifically, Privatisation Law No. 25 sought to regulate the privatisation process, facilitate the implementation of public sector goals, and provide the necessary ground rules for the transparent transfer of State assets to the private sector; it set out the procedures to be followed for privatisation operations under mechanisms that were subject to government control (ASE, 2008b).

[25] The Jordanian government established a number of Qualifying Industrial Zones (free zones) such as: (i) Aqaba Special Economic Zone; (ii) Ad-Dulay Industrial Park; (iii) Al-Hassan Industrial Estate; (iv) Al-Hussein Bin Abdallah II Industrial Estate; (v) Cyber City Park; and (vi) Jordan Gateway Project (Executive Privatisation Unit, 2007).

[26] This programme was called the Economic Adjustment Program and Self-Reliance in the aftermath of the economic crisis (Al-Akra et al., 2009).

As a result of this privatisation programme, the government's participation in the provision of goods and services decreased; the involvement of the State in public shareholding companies declined to less than 6%[27] (Al-Kheder et al., 2009). This reduction in the government's participation in key companies (e.g. Jordan Telecommunications, National Airlines**,** Jordanian Electricity, Jordan Phosphate Mines, and Royal Jordanian) increased the market capitalisation of the ASE to over $35 billion in 2008, as State-owned shares were offered for sale to the public **(**Executive Privatisation Unit, 2007)**.** Table 2.4 summarises the major privatisation transactions that occurred and the sizable revenues that were raised: both domestic and foreign investment are shown. As a result of the privatisation programme, over $2.0 billion was raised by the State and over $1 billion was invested in the country by foreign investors[28] (Executive Privatisation Unit, 2007). In addition, the details of the privatization terms depended on the type of assets being sold; for key companies only a percentage of the Government' assets were offered for sale (i.e. Jordan Phosphate Mines Company). However, in less important companies, 100% of the equity was disposed off (e.g. Royal Jordanian Air Academy). Moreover, a few sizeable sales involved foreign investors with large cash injections while smaller entities were disposed off either by selling them to the existing owners or local investors. An inspection of Table 2.4 reveals how the privatisation programme contributed to the inflow of foreign investment in the country.

[27] Prior to the privatisation programme, the government had acquired up to 70% of listed public shareholding firms in Jordanian capital market (Al-Akra et al., 2009).

[28] In order to achieve sales of State assets, the privatisation initiative in Jordan included several methods depending upon the shares being sold and the demand for equities among investors. These methods were capital sales (IPO & divestiture), sales to strategic investors, concession agreements, management contracts, and franchising (Executive Privatisation Unit, 2007).

Table 2.4: Main Completed Privatisation Projects in Jordan

Company Name	Privatisation Procedures	Buyer/Tenant/ Operator	Proceeds (US Millions)	Year
Jordan Cement Factories *	Block sale of 33%	French Lafarge Co. **	102	1998
	Block sale of 15%	Social Securities Co	42	2002
Public Transport Corporation	Franchising/10-yrs concession agreement	Local Investors	Annual fee: 0.7, new investment: 80	1998
Water Authority of Jordan Company	management agreement	French-Lema Co. **	Total fee: 8.8, IMF Loan $55	1999
Jordan Telecommunications *	Block sale of 40% and 11%	France Telecom **/Arab Bank	508 and 129	2000
	Block sale of 24.6%	Social security Co.	400	2000
	15% sale of shares	Initial public offering	83	2002
	Block sale of 10%	Kuwait Al-Nour Company **	165	2006
Ma'in Spa Complex	30-year lease and investment	French-Accor/ local investors**	9.2	1999
Airport Duty Free Shop	Concession agreement 12 years	Spanish Aldeasa Co. **	60 annual 0.5 and 8% of gross sale	2000
Jordan Flight Catering Ltd	Block sale of 80%	British Alpha Co. **	20 annual and 8% of annual sales	2001
Royal Jordanian Air Academy	Block sale of 100%	Local investors	6	2003
Arab Potash Company*	Block sale of 50%	Canadian PCS **	175	2003
Aqaba Port/Container Terminal	Management contract	Danish AP Moller Finance**	NA	2004
Jordan-Aircraft Maintenance Limited	Block sale of 80%	UAE Abraaj Capital **	56	2005
Jordan Phosphate Mines Company*	Block sale of 37%	Brunei Investment Agency**	110	2004
Electricity Distribution Co.	Block sale of 100%	Jordan Dubai Energy Co.	105	2007
Divestiture of the government's shares in 51 companies yielding more than $240 million.				

7Notes: This table provides a summary of the completed privatisation projects in Jordan. Source: The Executive Privatisation Commission, 2007. * Key companies, ** foreign investors.

In order to reassure the local population about this privatisation process and to ensure that goods and services would continue to be provided, the government revised the corporate governance structures and accounting regulations for all companies (ASE, 2008b). These changes enhanced the financial information that companies were required to publish in their annual reports. For example, Al-Akra et al. (2010b) investigated the impact of privatisation on the extent of voluntary disclosure among 46 newly privatised firms in Jordan over the period of 1996 to 2004. The findings from this study showed that the level of voluntary disclosure improved significantly as a result of privatisation. The authors argued that the accompanying regulatory reforms and pressure from foreign investors accounted for a significant fraction of that improvement. In addition, they also pointed out that the privatisation programme had affected Jordan's legal system to a significant extent: prompted the government to enhance legal rules covering investor protection and to enact new financial reporting and disclosure regulations; these rules improved the quality of disclosure.

2.4.4 The Legal System

The international accounting literature has long recognised that the prevalence of a particular legal system in a country affects the accounting system followed; countries are classified as either common law or code law in accordance with their legal systems (Fantl, 1971; Nobes, 1983; Berry, 1987; Doupnik and Salter, 1995; Jaggi and Low, 2000; Archambault and Archambault, 2003). This literature stated that in common law countries are: (i) there is an inclination towards fair presentation, transparency, and full disclosure; (ii) standard-setting is carried out by bodies in the private sector; and (iii) capital markets are the dominant source of financing for corporate entities (Mashayekhi and Mashayekh,

2008). On the other hand, in code law countries: (i) banks or governments are the main sources of financing; (ii) financial accounting is geared towards creditor protection and financial reporting is characterised by low disclosures; (iii) there is an alignment of financial accounting with tax laws; and (iv) governments exert a strong influence on setting accounting standards (Ashraf and Ghani, 2005). Extant empirical studies have shown a strong interest in examining the relationship between accounting systems and legal systems in several countries; indeed, La Porta et al. (1997; 2000) suggested that the type of legal system of a country predisposes it towards a particular system of finance. That is, a common law system focuses on shareholder rights and offers a stronger investor protection system as compared to that of a code law system (Mashayekhi and Mashayekh, 2008). This linkage leads to the development of strong capital markets in common law countries and weak ones in code law countries (Nobes, 1983). Consequently, in code law countries, debt rather than equity is the dominant source of financing (Al-Omari and Salimi, 2000).

Jordan has traditionally been classified as a code law country (ROSC, 2005). Hence, the financing of companies has been largely through banks (Abu-Nassar, 1993). In addition, basic shareholder rights to participate in company decisions and vote at the annual general meeting are not strong; indeed, the security associated with the registration of ownership is weak (Al-Akra and Ali, 2012). However, the Jordanian business environment has experienced considerable economic reforms which have led to an improvement in the investment activity and an increase in the emphasis that is placed on the capital market; these reforms include (i) the government's privatisation programme which was launched in the early 1990s and led to a redistribution of business ownership in key firms; (ii) the establishment of the ASE in 1999; and (iii) government issued regulations which were

aimed at enhancing the protection of shareholder rights, improving corporate governance structures, and reaffirming the Board of Directors' responsibilities (ROSC, 2005). In particular, the government introduced new business laws[29] mandating the adoption of IAS/IFRS which has increased the level as well as consistency of corporate disclosure among Jordanian listed companies (ROSC, 2005). These reforms have significantly influenced financial reporting and disclosure practices (Al-Akra et al., 2010a).

Partially as a result of these changes, ROSC (2005) indicated that: (i) the ASE has become one of the largest and most efficient markets in the Middle East; (ii) the level of investor protection in Jordan has increased significantly; (iii) firms tend to depend more on equity financing rather than bank financing; and (iv) the quality of financial reporting has improved significantly. In particular, La Porta et al. (1999) investigated the legal rules regarding investor protection for 49 countries including Jordan. They developed an index to examine the quality of legal protection for shareholders and creditors. The findings showed that common law countries generally have the strongest, and French civil law countries the weakest legal protection of investors while German and Scandinavian civil law countries are located between these two systems. In addition, they documented that the concentration of share ownership in the largest public companies is negatively related to investor protection and is consistent with the hypothesis that small, diversified shareholders are unlikely to be important in countries that fail to protect their rights. With respect to Jordan, the study found that the judicial system in Jordan was efficient and the protecton of shareholder rights is strong. Finally, Al-Akra et al. (2009) concluded that following the

[29]For example, the government enacted the Company Law of 1997, the Securities Law of 1997 and the Accounting Profession Law of 2003.

reforms which have been introduced, the Jordanian legal system has shifted towards a common law system.

2.4.5 The Accounting Profession

The influence and independence of the accounting profession is an indication of the effective enforcement of accounting standards (Ball et al., 2003). The extant literature has found that incentives to produce high quality financial statements are low in the absence of effective enforcement mechanisms (Abd-Elsalam and Weetman, 2003). Hope (2003a) described enforcement mechanisms as consisting of the rule of business law, shareholders' protection, insider trading laws, and judicial efficiency. With respect to Jordan, accounting and auditing regulations did not exist before the 1960s (Abu-Nassar, 1993). Thus, auditing firms were set up based on British company law (Al-Issa, 1988). The first audit office started its activities in Jordan during 1944 and was called the George Khader firm (Al-Htaybat, 2005); this was followed by the establishment of the Saba Audit firm in 1948 (Abdullatif, 2003). In the 1950s and 1960s many accounting firms were established and by 1975, their number had reached around 20 (Helles, 1992); currently there are around 400 accounting firms in Jordan (Al-Omari, 2010). Certainly, Jordan has offices for several national accounting firms which serve the local market as well as other markets in the Middle East (e.g. The Talal Abu-Ghazaleh Organization[30]). In addition, foreign accounting firms (KPMG, Deloitte Touche, Ernst and Young, and PricewaterhouseCoopers) have a presence in the country through professional contracts with Jordanian auditors (Suwaidan,

[30] The Talal Abu-Ghazaleh Organization (TAG-Org) is the largest Arab group of professional service firms in the fields of accounting, external audit, internal audit, corporate governance, taxation, educational consultancy, economic and strategic studies, management advisory services, and professional and technical training. TAG-Org operates out of 73 offices in the Middle East and North Africa, with representative offices in Europe and North America (Mardini, 2012).

1997). Currently, the big four accounting firms, as well as a half dozen national practices, dominate the auditing market in Jordan (Omar and Simon, 2011).

In 1961, the first Act to regulate the auditing profession was passed "The Auditing Profession Law No. 10". The primary objective of this Act was to organise the accounting and auditing profession within an institutional framework (Al-Shiab, 2003). This Act identified the requirements which had to be met in order to legally engage in practice; these requirements focused on the working experience of practitioners rather than their academic qualifications (Omar, 2007). Thus, the auditing profession was weakly organised by this Act since it did not stipulate any pre-requisites in terms of academic qualifications and professional training; hence, it did not set exams for auditing or accounting students to take (Al-Akra et al., 2009). In addition, the Act did not mandate which accounting principles, auditing standards, or professional ethics were to be employed by the auditing profession in Jordan (Haddad, 2005). In fact, Al-Shiab (2003) argued that this Act emphasised the role of the auditing profession in the private sector more than the qualification of the auditors themselves.

The weakness of the 1961 Act led to the introduction of the Accounting Auditing Profession Law No. 32 of 1985 (Mardini, 2012). The main aim of this Act was to reform accounting rules and reorganise the accounting profession; it paid particular attention to the qualifications of licensed accountants and auditors[31] (Naser, 1998). For example, the

[31]The academic requirements are: (i) a Bachelors degree or equivalent in accounting in addition to three years of accounting experience, with one working year to be in auditing; (ii) a Masters degree or equivalent in accounting in addition to two years of accounting experience, with one in auditing; (iii) a PhD or equivalent in accounting in addition to one year of experience in accounting or two years of teaching experience in one of the Jordanian universities; (iv) a Bachelors degree or equivalent in commerce, law, or economics in addition to five years working experience in accounting, with one year in auditing; (v) a Community College degree or equivalent in accounting in addition to six years of accounting experience, with two working years in auditing; and (vi) a certificate from an internationally recognised accounting professional body such as the

applicant had to pass a comprehensive exam before being admitted to the profession[32] (Mardini, 2012). Moreover, the Act classified public shareholding companies into three groups[33] and auditors into three categories (A, B, or C) based on their academic qualifications and experience; hence, it indicated which auditors could practice in which organisation[34] (Naser and Al-Katib, 2000); the Act was more developed than the initial regulation (Al-Shiab, 2003).

In addition, this Act stated that auditors should not audit the accounts of firms where there might be a conflict of interest. For example, they are not allowed to be a member of the Board of Directors or the management of any of their clients (Mardini, 2012). Based upon this Act, auditors had the right to audit all companies' records and provide a report based on their investigations. Specifically, this Act stipulated that the auditors' report have to: (i) contain all information and explanations for rendering an opinion had been provided by the firm; (ii) state that the financial statements presented a true and fair view of the financial position of the company under examination; (iii) state that the financial statements were prepared in accordance with the Companies Act and other related laws; (iv) state that the financial statements were prepared in accordance with GAAP; and (v) note any violation of the Companies Act or other laws which had a material effect on the company's financial statements had to be noted (Al-Malkawi, 2007).

Institute of Chartered Accountants in England and Wales or the Institute of Chartered Accountants in Scotland (Ministry of Industry and Trade (1985).

[32] This exam includes several fields, namely: financial accounting, auditing, legislation, taxation and financial system.

[33]These groups are: (i) banks and financial institutions, insurance, industrial public shareholdings, branches of foreign companies and government agencies; (ii) public shareholding companies not mentioned in (i), and (iii) sole traders and others not mentioned in (i) and (ii).

[34]Auditors should practice their profession according to the following conditions: (i) category A auditors are allowed to audit the accounts of all companies; (ii) category B auditors are allowed to audit the accounts of group (ii) and (iii); and (iii) category C auditors are allowed to audit just the accounts group (iii) (Minisrty of Industry and Trade (1985).

Importantly, this Act provided for the establishment of the most vital organisation associated with the accounting and auditing profession in Jordan; the JACPA (Haddad, 2005). The main objectives of the JACPA are to build up the competence and independence of its members, publish accounting principles and training materials for its members, and develop accounting and auditing standards that are reasonable and relevant for the needs of the country (JACPA, 2010). JACPA became a member of the International Federation Accountants (IFAC)[35] in 1992 (Obaidat, 2007). JACPA is established in 1989 and given an advisory role. At that time, there were no any specific GAAP to be applied by Jordanian listed companies (Al-Akra et al., 2009). Hence, JACPA recommended that all Jordanian listed companies should apply IAS/IFRS in the preparation of their financial statements. However, it had no power to ensure that its recommendations were followed.

In order to improve the business environment and attract foreign investment, the government of Jordan issued the Company Act No. 22 and the Temporary Securities Law No. 23 in 1997 which extended the power of JACPA (Al-Shiab, 2003). These two pieces of legislation confirmed that: (i) auditors for companies that are controlled by the Jordanian Securities Commission (JSC) are required to be a member of JACPA; (ii) auditors should comply with instructions published by JACPA; (iii) JACPA, through its co-operation with the JSC, is responsible for developing the necessary regulations to ensure compliance with

[35] The International Federation Accountants (IFAC) is an independent standard-setting board; it establishes international standards on ethics, auditing and assurance, accounting education, and public sector accounting. In addition, IFAC provides guidance to encourage high level of performance by professional accountants in business. Hence, membership within IFAC is important for national accounting professional bodies as each member applies the international standards in their field such as accounting and auditing.

its constructions; and (iv) JACPA must publish a list of auditors who satisfy its requirements on an annual basis (JACPA, 1987).

Finally, the government enacted the Accountancy Professional Law in 2003 which extended the power of JACPA; it entrusted JACPA with a vital role in facilitating the adoption of IAS/IFRS, providing interpretations of IAS/IFRS, and monitoring early adoption.

2.4.6 The Taxation System

The system of taxation has had an influential impact on accounting practices in some countries while in others it has had little or no impact (Jaggi and Low, 2000). Roberts et al. (2005) noted that code law countries tend to have some common tax and financial reporting regulations (e.g. Germany), while common law countries tend to keep tax and financial reporting practices separate from each other (e.g. the US and UK). However, prior literature has suggested that other classifications of countries are possible. For example, research has identified three categories of tax system: (i) where tax regulations and financial reporting regulations are independent; (ii) where financial reporting rules are used for tax purposes; and (iii) where tax rules are used for financial reporting practices (Doupnik and Salter, 1995). With respect to Jordan, the dearth of natural resources has meant that individual and corporate taxpayers are the main internal source of government revenue; thus the government continuously updates its tax rules (Mardini et al., 2012). The most influential tax regulation in Jordan is the Corporate Income Tax Law No. 57 of 1985 and its amendments in 1989, 1992, 1995, 2000, 2005 and 2009 (Abu-Baker, 1995). According to these laws, all of the deductions claimed for tax purposes should match sums appearing in

the annual reports (Zaid, 2004). Certainly, the reliance of government on income tax has affected the accounting practices of Jordanian firms (Al-Shiab, 2003). It has resulted in the management of reported income numbers and an unwillingness to adopt new accounting and auditing rules (ROSC, 2004). As a result, several accounting related enactments have been introduced in order to expedite the process of calculating and collecting taxes[36] (Khasharmeh, 1995). In terms of accounting practices, the Income Tax Law No. 57 of 1985 is considered one of the most important pieces of legislation in terms of its reporting and disclosure requirements (Al-Shiab, 2003; Haddad, 2005; Omar, 2007). In this regard, this Act and its amendments suggested that the most important issues which affect financial reporting are measurement matter, namely: depreciation, bad debts, and inventory valuation (Article 9). In addition, Al-Akra et al. (2009) argued that the Jordanian government's reliance on taxes as an internal source of revenue has largely influenced the accounting practices of Jordanian firms, resulting in several incidents of accounting manipulation and departures from established accounting and auditing procedures. Hence, a culture change is required to reduce the impact of tax accounting on the general purpose of financial statements (ROSC, 2004).

2.4.7 Culture

Recent accounting research postulates that culture plays an important role in developing and changing the accounting and disclosure practices of a country (Jaggi, 1975; Hofstede and Bond 1984; Nobes, 1984; Gray, 1988). Riahi-Belkaoui and Picur (1991) argued that

[36] These enactments include: Income Tax Law No. 57 of 1985, Customs Law No. 20 of 1998, Law No. 16 of 2000 Amending Customs Law No. 20 of 1998, Regulation No. 80 of 2000 For special Tax Purposes,Taxes Imposed On Imported And Re-exported Goods Law No 20 of 2000, Income Tax Law No. 25 of 2001,Regulation No. 81 of 2001 Concerning Registration Threshold For Sales Tax Purposes, Regulation No. 53 of 2005 Income Tax Regulation in the Aqaba Special Economic Zone (ASEZA), and Sales Tax Regulation No. 54 of 2005 (Al-Akra et al., 2009).

accounting is determined by culture which accounts for the lack of consensus across different countries as to what represents proper accounting methods.

The culture of the Kingdom of Jordan is based on a strong Arab tradition although the impact of Western ideas has grown over recent decades (Al-Akra et al., 2010a). Further, Jordan is a collective society characterised by Islamic values, with a preference for strong social links which has encouraged secrecy (Piro, 1998). Beard and Al-Rai (1999) indicated that the tribal origin of Jordan results in a tendency towards opaqueness – especially with regard to disclosure requirements. On the other hand, Jordan was a British colony for the first half of the 20th century; in fact, the British military remained in Jordan until the mid 1940s (Zaid, 2000). Thus, strong business and economic relationships exist between Jordan and UK and the British approach to transparency as well as disclosure has had an influence (Marashdeh, 1996). This has allowed Jordan to import certain aspects of the British accounting system[37] which ultimately resulted in the adoption of IAS/IFRS (Helles, 1992).

Obviously, religion is an important cultural factor within Jordan and it has played a key role in the development of the economy (Al-Akra et al., 2009). The extant literature of the impact of culture on accounting practices has focused on socio-political factors which influence individuals' behaviour and overlooked other influences (Hamid et al., 1993; Napier, 2009). In particular, Hamid et al. (1993) argued that "religion is admissible as a cultural factor; its influence upon the development of accounting and business structures

[37] There was no material impact of UK GAAP on accounting practices in Jordan as these practices were only applied by a few companies on a voluntary basis.

has not been explored in depth". Indeed, he argued that religion in general, and Islam in particular, have the potential to extend a profound cultural influence in the quest for the international harmonization of accounting" (p. 17). A detailed exploration of the impact of religion is not the central purpose of this thesis; however, it is acknowledged that such a story may be valuable. The clearest evidence of the impact of religion on accounting practices, with respect to Islam, is the role of religion in Islamic banking[38] (Roberts et al., 2005). In the past, processing business activities in accordance with Islamic values was practiced only in Islamic states, including: Egypt, Saudi Arabia, Malaysia, and Pakistan. However, nowadays transacting in accordance with Islamic rules is practiced all over the world e.g. US, UK, Australia, and Canada (Askary, 2006). In addition, some of the largest financial institutions in the world now offer Islamic products[39] to satisfy the needs of their Muslim customers. Examples of these institutions are Deutsche Bank, Citibank and HSBC (Askary, 2006). The main distinction between conventional banks and Islamic banks is that under Islamic rules, usury (Riba) is prohibited; as a result, customers cannot invest their money with any bank that pays interest (Askary, 2006). This clearly influences accounting practices as conventional loans which earn interest are not permitted (Clarke et al., 1996). Indeed, there has been considerable debate in the Islamic world about whether or not accounting standards are required to deal with this issue (Askary, 2006). Thus, many

[38] The term "Islamic banking" relates to finance-related practices. However, the concepts discussed in this section refer to some accounting concepts that are addressed by Islamic rules and applied by banks. These concepts include valuation methods (fair value and historical cost measurements) and transparency (disclosure).

[39]Instances of these Islamic products include: (i) Musharaka (participation): two sides make a joint contribution to the capital of the company/project, and share in profits/losses on a pro rata basis; (ii) Mudaraba (speculation), where the financing party provides all the capital, but gets only a pre-agreed proportion of profits with the rest going to the firm/ entrepreneur; (iii) Ijara (leasing), where bank purchases item (e.g. machinery or building) and another party leases it and pays a user fee (rental), Ijarafrequently contains a provision for eventual ownership; and (iv) Murabaha, where the financier acquires the goods/equipment/materials, and re-sells them with a mark-up to the other party, either at a lump-sum or gradually via instalments (Buckmaster, 1996).

Islamic financial institutions use the accounting standards which are issued by the Accounting and Auditing Organization for Islamic Financial Institutions rather than IAS/IFRS (Buckmaster, 1996). However, Clarke et al. (1996) argued that there are other conflicts between IAS/IFRS and Islamic principles, particularly with respect to valuation methods. The valuation method which is recommended by the majority of Islamic jurists is based on the selling price (or exit price, current cash equivalent, or net realisable value) for Zakat calculation (Clarke et al., 1996). That is, "cost" or "historical cost system" is irrelevant for Zakat purposes; this matter is also notable with regard to inventory and receivables valuation, deferred tax accounting, goodwill accounting and expense capitalisation (Askary, 2006).

Importantly, IAS/IFRS disclosure requirements meet one of the most important Islamic principles: namely, transparency. Islamic rules encourage transparency in all business activities including accounting information and prohibit the hiding of information from shareholders and regulators (Al-Akra et al., 2009). In Jordan, Islam is the recognised religion of the country and it has a very significant impact on business activities. However, even though differences exist between Islamic accounting and IAS/IFRS, publicly listed firms in Jordan must apply IAS/IFRS in accordance with the Securities and Company Acts in the Kingdom since 1997.

By and large, the current study believes that the major changes that have occurred in financial reporting practices in Jordan have arisen only when there were changes in both underlying legal rules and developments in the political and economic fields. Moreover, the study concludes that the effect of culture on the accounting system in Jordan cannot be

explained unambiguously because of the country's political and economic development. This conclusion is in line with the findings of Jaggi and Low (2000) which concluded that cultural values do not predict disclosure levels once legal origin is considered. This is apparent in Jordan from various economic reforms which have been introduced by the government such as: (i) the enactment of several Company and Securities Acts; (ii) the establishment of the Jordanian capital market; and (iii) the introduction of the privatisation programme.

2.4.8 Corporate Governance

Kim (2006) argued that the corporate governance concept refers to the rules and standards that govern the relationship between a company's management and its stakeholders. Specifically, Oman (2001) pointed out that corporate governance refers to the private and public institutions and consists of laws, regulations and accepted business practices, which govern the relationship between the stakeholders in a market economy. With respect to Jordan, Al-Akra et al. (2009) has argued that, for decades, corporate governance rules were missing. Indeed, the Company Act No. 22 of 1997 provided the first guidelines on the corporate governance structure of Jordanian listed companies; it sought to protect the rights of shareholders and highlight responsibilities of the board of directors in the new rules (Hutaibat, 2005). Furthermore, the Act mandated that all public shareholding firms should have an audit committee which comprised of three non-executives directors; it required this committee to meet at least four times a year in order to examine and discuss the firm's internal control mechanisms including the work of both the external and internal auditors (ROSC, 2004). This committee also has responsibility for monitoring compliance with the requirements of various Company and Securities Acts.

More recently, the Central Bank of Jordan issued the Directors Corporate Governance Code for banks in 2007. This code consists of three main principles, namely: (i) fairness in the treatment of all stakeholders; (ii) transparency and disclosure to enable stakeholders to assess the bank's financial performance and condition; and (iii) accountability in the relationships between the bank's executive management and the Board of Directors, and between the Board of Directors and the shareholders and other stakeholders (Bank's Corporate Governance Code, 2005). Consistent with the 1997 Company Act, this code reaffirmed the responsibilities of the Board of Directors, the rights of stakeholders, and the role of the audit committee. Investigating the extent to which Jordanian banks comply with corporate governance code, Bawaneh (2011) pointed out that Jordanian banks paid a great deal of attention to this document by acting in accordance with guidelines specified.

2.5 The Uniqueness of Jordan Context

As discussed earlier in this chapter, the extant literature has indicated that each country has its unique contextual background which results in slight variations in accounting practices (Cooke and Wallace, 1990); in this respect, Jordan is no different. Indeed, Jordan exhibits a number of unusual features which add to the relative uniqueness of the country's context; this is especially the case with its political and economic development as compared to other Arab countries. Even though Jordan is an Arab country where the importance of Arabic culture, traditions, customs and values are apparent, dramatic developments in the country over the last century has made Jordan different (Omar and Simon, 2012). For example, as a result of being a British colony for more than two decades, the structure of the political system in Jordan is similar in some respects to that in the UK - although a lot of differences

also exist. In particular, the political system in Jordan can be characterised as a constitutional monarchy (Lust-Okar, 2001). The legislative power is vested in the King and the national assembly; the national assembly consists of a Senate which is appointed by the King and the House of Representatives which is elected by the population (Al-Shiab, 2003). This has resulted in a more open and democratic political system in Jordan as compared to other Arab countries which are governed by fairly autocratic rules such as Syria, Yemen and Algeria. The adoption of a more open political system in Jordan has coincided with a significant level of economic development; in order to liberalise the economy and attract a great deal of foreign investment, the political constitution became more democratic (Omar, 2007). For example, the Government established the capital market of Jordan in 1975 which is backed by a relatively strong legal framework; this establishment of the Jordanian capital market has led to a growth in the economic activity as well as increasing the volume of foreign trade as a result of the open market policy adopted (Al-Omari, 2010). This development represents another distinguishing feature of the Jordanian system. In order to liberalise and enhance the economy, the Government initiated the privatisation programme in the early 1990 which increased the participation of the private sector in the operation of productive activities. These economic developments were backed by a strong legal framework designed to protect the rights of shareholders (ROSC, 2004). Furthermore, developments in the legal system have led to the adoption of IAS/IFRS in the preparation of listed companies' financial statement since 1997. In particular, the Securities Act and Company Acts of 1997 mandated Jordanian listed companies to apply IAS/IFRS when preparing their annual reports; failure to do so would give rise to sanctions including fines or a delisting. Indeed, the unusual position of Jordan

where the legal system is a mix of both code and common law systems makes the country an ideal place to undertake the current study.

2.6 Conclusion

This chapter has examined Jordan's political and economic development and its impact on accounting practices in an attempt to contextualise the empirical evidence that follows later in the thesis. In addition, the chapter discussed the financial reporting framework in Jordan, including the development of accounting regulation and related accounting regulatory changes. Moreover, the chapter highlighted the major factors that have influenced the accounting practices in Jordan since its establishment.

Prior to 1997, there was no legally established accounting and auditing standard-setting body in Jordan. Accounting practices were regulated mainly by the Ministry of Industry and Trade with a minor role played by the private sector and JACPA. There was no enforcement mechanism to ensure that companies complied with the disclosure requirements of the laws that were issued. In addition, the requirements of laws issued before 1997 were vague with no set form or specific content for financial statements laid down. In 1997, the capital market of Jordan witnessed a sizeable transition that began with the issuance of Securities Law No. 23 and Company law No. 22 of 1997 which were aimed at reforming the financial market and improving disclosure standards. Both laws mandated the adoption of IAS/IFRS that are issued by the IASB by all Jordanian public shareholding companies. Thus, Jordan has implemented IASs since 1997; this long time span makes Jordan an appropriate country for researching the impact of FI-related accounting standards on the FI disclosure provided by Jordanian listed companies as well as their value

relevance. Further, Jordan is an open economy where companies operate in different business areas and export to many countries around the world; thus the issue of FI reporting and compliance with IFRS 7 should be of interest to many stakeholders. Furthermore, the compliance with accounting standards that is examined in the current study has not been investigated yet, hence, it will be interesting to see whether the emphasis on greater compliance that has been introduced with the new legislation will lead to a marked improvement in the disclosure of FI information under IFRS 7.

Chapter Three
A Literature Review

3.1 Introduction

Financial reporting is one of the main fields within the accounting discipline; it encompasses many distinct research areas (Beattie, 2005). Disclosure about the usage of Financial Instruments (FI) is an important part of this financial reporting research (Bischof, 2009). Indeed, DeMarzo and Duffie (1995) have argued that disclosing information about FIs, especially derivatives and their associated risks, is seen as problematic for companies because of the commercial sensitivity involved. Yet regulators and accounting standard-setters have recognised that disclosures about FIs in financial statements is needed in order to provide statements with decision-useful information (Coetsee, 2010b) and to enable the shareholders to hold company executives to account for the stewardship of the resources that have been supplied to the firm (Barth at al., 2001)

The aim of this chapter is to review the extant literature associated with the research focus of the current thesis; namely, the disclosure of information about FIs and its value relevance. This review presents a basis for understanding the research about the usefulness of FI disclosure contained in the remainder of the current thesis. Section 3.2 discusses FIs in practice; it reviews the extant empirical studies which have investigated how companies use FIs and provides a brief discussion of some of the financial scandals associated with this FI usage. Section 3.3 focuses on FI disclosure requirements from an accounting standards perspective; it concentrates on IAS 30, IAS 32 and IFRS 7 which are the main focus of the current study. Section 3.4 provides a comprehensive review of the extant empirical literature on FI disclosure; this review includes a synthesis of the studies that have been conducted in both developed and developing countries. Section 3.5 examines the extant literature on the value relevance of FIs disclosure. Finally, a conclusion to the current chapter is contained in Section 3.6.

3.2 Derivative Financial Instruments in Practice

FIs are financial contracts whose value depends on, and are derived from, the value of an underlying asset, reference rate or index (Bullen and Porterfield, 1994). More specifically, the IASC (1996) defined an FI as "any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise" (IAS 32, Para. 11)[40]. Indeed, Lee and Tan (1994) have argued that FIs can be both primary instruments (non-derivatives such as receivables, payables, equity securities) and secondary instruments (derivatives such as forward contracts, options). Specifically, derivatives are FIs which satisfy three conditions: (i) their value changes in response to a change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices, credit rating or credit index; (ii) products that require no initial net investment or an initial net investment that is smaller than would be required for other types of contract that might have a similar response to changes in market factors; and (iii) that are settled at a future date (IAS 39, Para. 11). In practice, derivative instruments[41] generally include several types of products such as futures, forwards, swaps and option contracts (Crawford et al., 1997, p. 112-113)[42].

[40] "A financial asset is any asset that is (i) cash; (ii) an equity instrument of another enterprise; (iii) a contractual right to receive cash or another financial asset from another enterprise or to exchange financial instruments with another enterprise under conditions that are operationally favourable to the entity; or (vi) a contract that will or may be settled in the entity's own equity instruments (derivative or non-derivative). A financial liability is any liability that is: (i) a contractual obligation to deliver cash or another financial asset to another enterprise or to exchange financial instruments with another enterprise under conditions that are potentially unfavourable; or (ii) a contract that will or may be settled in the entity's own equity instruments (derivative or non-derivative). Finally, an equity instrument is a contract that evidences a residual interest in the assets of an enterprise after deducting all of its liability" (IAS 32, 1995).

[41] The main focus of the literature in on derivative financial instruments due to: (i) their material impact on firms' financial position and performance; and (ii) such derivatives were responsible for most of the financial scandals that have occurred over the last two decades. However, the current study investigates derivative and non-derivative FIs; according to the accounting standards examined in the current study, both are required to be disclosed in companies' financial statements.

[42] Futures are standardised contracts which allow the purchaser to buy or sell a specific quantity of a commodity, financial instrument, or index at a specified price on a specified date. Forward contracts are similar to future contracts except that forwards are not traded on an exchange, they are less liquid but offer more flexibility in design as to amount and time period. Swaps are an exchange of payment streams between two parties for a specified period of time. Option contracts give the holder the right, but not the obligation, to sell or purchase an item at a stated price during a specified time period (Crawford et al., 1997).

Over the last two decades, many derivative instruments have evolved that are both complex and difficult to categorise (Condon, 2008). Indeed, Bullen and Porterfield (1994) argue that derivatives can be classified into two categories. The first category includes forward contracts which commit one party to buy and another to sell a certain asset at a future date for a specified price; these contracts benefit from favourable movements in the price of the underlying asset, rate, or index; they expose parties to the risk of losses from unfavourable price movements and generally involve no payment at the inception of the contract (Li and Gao, 2007). The second category involves options which require the holder to pay a premium to the issuer at the inception of the contract in exchange for the ability to benefit from favourable movements in the price of the underlying asset, rate, or index in the future; with options, there is typically no exposure to risk from unfavourable price movements other than the loss of the premium paid (Chalmers and Godfrey, 2004).

The extant literature has highlighted a number of factors that have led to an explosive growth in the usage of these FIs[43]. First, the finance industry has been successful in creating a variety of new Over-The-Counter (OTC) and exchange-traded products which are designed to suit the specialist needs of certain firms (Froot et al., 1993; Li and Gao, 2007). Second, deregulation of the financial services industry, increased competition among financial institutions, changes in tax laws and developments in computer technology have also contributed to a growth in this usage (Hwang, 2002; Gebhardt et al., 2004). Indeed, Dunne et al. (2003) argued that the strategic use of derivatives and other FIs has enhanced a

[43] The usage of FIs (especially derivatives) has increased greatly over the last few years; specifically, the Derivatives Market Activity Reports indicate that the derivative usage was increased from $100,000 billion in 2001 to $700,000 billion in 2010 (Bank for International Settlements, 2010).

firm's ability to manage its risk exposures in an environment characterised by fluctuating interest rates, variable currency exchange rates and volatile commodity prices.

A number of empirical studies have investigated risk management practices in companies by exploring how firms use FIs to manage their risk exposures (e.g., Bodnar et al., 1995; 1996; 1998; Grant and Marshall, 1997). In particular, these studies have focused on firms' usage of FIs (especially derivatives); all of these studies have documented a big increase in the use of derivatives and other FIs over recent years. Table 3.1 summarises key features about these studies on the usage of derivative instruments by companies. An analysis of this table reveals that: (i) derivative instruments are widely used by companies (both financial and non-financial) in both developed (e.g. the US, the UK) and developing markets (e.g. Brazil, Pakistan, Turkey); (ii) a variety of derivative instruments have been used by companies such as options, forwards, futures, swaps, OTC products and hybrid debt; (iii) firms tend to use derivative products for different purposes such as hedging, earnings management and/or speculation; and (iv) market risk is the most common risk to be hedged against although other types of risk are also hedged (e.g. credit and liquidity risks).

Panel A of this table shows studies that have examined FI usage by US firms; it illustrates that between 35% (e.g., Bodnar et al., 1995) and 75% (e.g. Naito and Laux, 2011) of US non-financial companies tend to use derivative products; indeed, most of those who use these FIs do so for hedging and/or earnings management purposes. Panel B of the table indicates that UK firms (financial and non-financial) report some of the highest usage of derivative products with between 60% (Mallin et al., 2001) and 90% (e.g. Grant and Marshall, 1997) of respondents to two large postal surveys claiming to use these instruments to hedge their risks. However, UK insurance firms are less likely to use these products with only 16% admitting to purchasing derivatives (Shiu, 2007). In another study

for Australian insurance firms, De Ceuster et al. (2003) arrived at similar results (13% usage). Thus, the results in the table support that the usage of derivatives varies from one sector to another.

Panel C of Table 3.1 illustrates derivatives usage in New Zealand and Australia; while companies in New Zealand have a great deal of experience in using derivatives with between 53% (e.g. Berkman et al., 1997) and 67% (e.g. Prevost et al., 2000) indicating that they have purchased them, their counterparts in Australia were less involved with up to 27% using these products (Nguyen et al., 2009). Companies in EU countries other than the UK have also used derivatives, such as Belgium (66%), the Netherlands (60%), Sweden (59%), Greece (34%) and Italy (88%). Panel D of Table 3.1 reveals that enterprises in EU countries use derivatives mainly for hedging purposes. Finally, Panel E of this table shows FI usage in developing countries; this usage has ranged from 33% (e.g. Peru) to 60% (e.g. Turkey, Pakistan). Indeed, companies in emerging markets have explicitly indicated that they use derivatives to speculate about the direction of the market as well as for risk management purposes (e.g. Turkey, Pakistan). In addition, derivative instruments which are used by companies in developing countries have tended to be less complex (e.g. forwards, futures, options, swaps) compared to those employed by their counterparts in developed countries (e.g. OTC derivatives, hybrid debt).

Table 3.1: Key Features of the Prior Research into Derivative FIs Usage

Study	Method	Sample	Industry	Derivatives Usage	Types of Derivatives Used	Reasons for Using Derivatives	Risks Being Hedged
Panel A: US Studies							
Bodnar et al. [1995]	Questionnaire	530	NF	35%	OTC products, options, swaps, and futures	Hedging and earnings management	Credit risk, liquidity risk and transaction costs
Philips [1995]	Questionnaire	660	NF	63%	Futures, forwards, options and swaps	Hedging	Market risk
Bodnar et al. [1996]	Questionnaire	350	NF	41%	Hybrid debt and exchange-traded options	Hedging and earnings management	Credit risk, liquidity risk and transaction costs
Bodnar et al. [1998]	Questionnaire	399	NF	50%	OTC products, options, swaps, and futures	Hedging	Credit risk, liquidity risk and transaction costs
Bodnar et al. [2003]	Questionnaire	267	NF	44%	OTC products, options, exchange-traded and swaps, options	Hedging and earnings management	Market risk
Fauver and Naranjo [2010]	Observations	1,746	NF	50%	Structured derivatives	Hedging	Market risk and credit risk
Naito and Laux [2011]	Dataset	434	NF	75%	Futures, forwards, OTC products	Hedging	Market risk
Panel B: UK Studies							
Grant and Marshall [1997]	Dataset	250	FNF	90%	Futures, options swaps, and combinations	NA	Market risk
Mallin et al. [2001]	Questionnaire	230	NF	60%	Futures, OTC products, forwards, exchange options	Earnings management	Credit risk, liquidity risk and market risk
El-Masry [2006]	Questionnaire	173	NF	67%	Hybrid debt, structured derivatives, OTC products	Hedging	Credit risk, liquidity risk and market risk
Shiu [2007]	Dataset	360	Insurance	16%	Futures and options	Hedging	Market risk and liquidity
Panel C: Studies in New Zealand and Australia							
Berkman et al. [1997] New Zealand	Questionnaire	79	FNF	53%	Forwards and options	NA	Market risk
Prevost et al. [2000] New Zealand	Questionnaire	73	FNF	67%	Forwards, options and forwards	Hedging	Market risk
De Ceuster et al. [2003] Australia	Dataset	481	Insurance	13%	Forwards, OTC products, futures and options.	Hedging	Market risk and liquidity risk

Nguyen et al. [2009] Australia	Observations	2,695	FNF	27%	Futures, forwards, options and swaps	Hedging	Market risk
Panel D: Studies in Other EU Countries							
De Ceuster et al. [2000] Belgium	Questionnaire	334	FNF	66%	Forwards, options, forwards, swaps	Hedging	Market risk and liquidity risk
Bodnar et al. [2003] Netherlands	Questionnaire	84	NF	60%	OTC products, options, exchange-traded and swaps	Hedging	Credit risk, market risk, liquidity risk
Alkeback et al. [2006] Sweden	Questionnaire	117	FNF	59%	Futures and options	Hedging	Market risk
Kapitsinas [2008] Greece	Questionnaire	110	NF	34%	Forwards, futures, OTC products, hybrid debt	Hedging	Market risk
Bodnar et al. [2008] Italy	Questionnaire	158	NF	88%	Futures and structured derivatives	Hedging	Market risk
Panel E: Studies in Emerging Markets							
Saito and Schiozer [2005] Brazil	Questionnaire	74	NF	46%	Futures and options	Hedging and earnings management	Market risk
Martin et al. [2009] Peru	Questionnaire	65	NF	33%	Futures, options and swaps	Hedging and speculating	Market risk
Yakup and Asli [2010] Turkey	Observations	150	FNF	40%	Futures, forwards, options and swaps	Hedging and speculation	Market risk, cash flow, fair value
Mahmood and Kashif-ur [2010] Pakistan	Questionnaire	31	NF	55%	Futures and options	Hedging and speculation	Cash flow volatility and market risk
Afza and Alam [2011] Pakistan	Observations	105	NF	60%	Futures and options	Earnings management	Market risk

Notes: This table illustrates the main characteristics of studies that have investigated FI usage throughout the world. Datasets and observations mean that information was typically obtained from databases such as Datastream and/or from annual reports. NF: non-financial firms, FNF: financial and non-financial firms.

With this widespread and increasing use of FIs, there has been a considerable rise in the number of reported financial scandals throughout the corporate sector. Indeed, sizeable losses have been attributed to the misuse of FI products, especially derivatives (Drummond, 2002). These scandals and losses have contributed to calls for greater transparency in the area (Dunne et al., 2003), increased disclosure (Li and Gao, 2007) and tighter regulations (Benston and Hartgraves, 2002).

Despite the fact that firms claim to use FIs to hedge their financial exposures, the last two decades have witnessed many financial scandals and corporate collapses which have been attributed to the use of FI derivatives (Jayaraman and Shrikhande, 1997; Jacque, 2010). Indeed, Jacque (2010) labeled FIs in general, and derivatives in particular, as "financial weapons of mass destruction" (p. 1). Table 3.2 summarises some of these financial collapses which have led to either bankruptcy (e.g. Barings, Enron, AIG) or significant losses (e.g. Bank Negara, Allied Irish Bank) for the firms involved; these examples highlight the danger associated with the inappropriate use of derivatives and have led to calls for greater financial disclosures so that investors and other stakeholders can monitor the risks associated with FI usage[44]. A visual inspection of this table shows that although financial losses associated with derivative usage can be traced back to the 1960s (e.g. Citibank), they have grown significantly over the last two decades (e.g. Shell Showa, Gibson Greeting Cards, AIG). An analysis of this table reveals that four types of derivatives have caused these scandals, namely: forwards, futures, options and swaps. Upon closer scrutiny, Table 3.2 indicates that derivative debacles have been rooted in ill-devised

[44] The current study does not investigate financial scandals associated with FI; the examples are mentioned solely to highlight the disadvantages of the misuse and abuse of FI as well as the important role of FI as a risk management mechanism.

financial engineering[45] (e.g., Metallgesellschaft AG), non-authorised speculative trading (e.g. Allied Lyons), misunderstood products (e.g. Procter and Gamble) and concealed losses from speculative trades (e.g., Showa Shell). Finally, the table illustrates that these collapses have occurred in both developed (e.g. the US, the UK) and developing countries (e.g. Malaysia).

[45] Financial engineering involves the design, development, and implementation of innovative financial instruments and processes, and the formulation of creative solutions to problems in finance (Finnerty, 1988). This task is fulfilled by innovatively combining already existing components to form new FIs (Breuer and Perst, 2007).

Table 3.2: Key Details about Financial Scandals Caused by Derivatives

Company	Year	Country	Amount of Losses	Loss-Attributed Products
Citibank	1964	US	$8 million	Forwards: currency trader speculated on pound sterling
Allied Lyons	1991	UK	$269 million	FX Options: treasury speculation on lower volatility of dollar-pound exchange by selling currency option
Shell Showa	1993	Japan	$1 billion	FX Forwards: currency trader rolled over dollar forwards to cover initial losses
Metallgesellschaft AG	1993	Germany	$1.6 billion	Futures: sold long-dated oil forwards hedged by "staking and rolling" oil futures
Bank Negara	1994	Malaysia	$3.16 billion	FX Forwards: speculation in the FX market
Procter and Gamble	1994	US	$157 million	Swaps: purchased interest rate swaps to lower the cost of capital
Sumitomo	1995	Japan	$2.6 billion	Futures: a chief copper trader cornered the copper market realising large profits until regulators forced the company to resume normal trading
Orange County	1995	France	$1.5 billion	Swaps: used excessive leverage and interest rate swaps to turbo-charge its earnings
Barings	1995	UK	$1.4 billion	FX Options and FX futures: a "rogue trader" concealed a streak of speculative losses on the Nikkei 225 index
Gibson Greeting Cards	1995	US	$27 million	Swaps: purchased leveraged interest rate swaps to reduce the cost of capital
Long-Term Capital Management	1998	US	$2.3 billion	Swaps: exploited quasi-arbitrage convergence trades in US treasuries using extreme leverage until the Asian crisis turned illiquidity into insolvency
Enron Corporation	2001	US	$65 billion	Options manipulation: management hid options' energy contract losses of its SPEs and overvalued its reported earnings
All-First Financial [Allied Irish Bank]	2002	Ireland	$694 million	FX Options and forwards: currency trader concealed a streak of speculative losses on yen forwards by writing deep-in-the-money currency options
Amaranth	2006	US	$5 billion	Futures: a hedge fund cornered the natural gas futures market
Societe General	2008	France	$7.2 billion	Options and futures: a chief trader undertook wild proprietary trading on stock index futures
AIG	2008	US	$200 billion	Swaps: sold credit default swaps without proper reserving for actual defaults

Notes: This table explains the characteristics of major financial debacles that have occurred over the last two decades. This list is not intended to be exhaustive.

Prior literature has suggested several reasons for these scandals. First, failings of the risk management function are at the core of financial difficulties from these derivative scandals (Jacque, 2010); basically, risk management aims to identify risks faced by the firm (e.g. market, liquidity and credit risks), and formulate and implement risk management policies (e.g. hedging) which are consistent with the firm's appetite for risky activities (Finnerty, 1988). For instance, hedging activities and interest rate risk exposure may involve different units within a firm which entails coordination about their use of derivatives to keep the overall portfolio exposure within the risk tolerance boundaries set by the Board of Directors (Chew, 1996). To illustrate this point, the procurement department at Showa Shell which was in charge of oil purchases was not communicating within the treasury department nor was it in contact with the currency traders who were hedging the yen cost of the firm's oil bill (*The Economist*, 1994); close collaboration between these different units was clearly crucial to the effective design and implementation of a hedging policy (Jacque, 2010). Indeed, Dunne et al. (2003) argued that one of the most important lessons offered by some financial collapses was the need for sound risk management procedures and internal control mechanisms within companies which use derivative products.

Second, reporting and auditing failures for derivative products represent a key factor behind these scandals (Jacque, 2010); derivative reporting is often poorly addressed by large organisations (Brady and O'Harrow, 2008) and auditing expertise in the internal control function and among professional accounting firms was often relatively poor (Li and Gao, 2007). For instance, the very sizeable positions built up by the treasury of Allied Lyons should have been periodically scrutinised by senior management and the external auditor but were never done so (Jacque, 2010).

Third, the failure of corporate governance and internal control mechanisms is frequently considered as one of the influential factors as to why these scandals occured (Dunne and Helliar, 2002); the misuse and the abuse of FIs were responsible for most of the major financial frauds that have occurred in the last 20 years (Overdahl and Schachter, 1995; Drummond, 2002). The need for tighter corporate governance mechanisms were clearly illustrated in the Metallgesellschaft AG fraud case (Jacque, 2010); although this firm got into difficulties because of the inappropriate use of derivatives, well-structured corporate governance rules in Germany saved Metallgesellschaft AG from falling into bankruptcy (Jayaraman and Shrikhande, 1997).

Finally, it has been argued that weaknesses within financial reporting rules have allowed companies to adopt opaque policies when accounting for FIs (Benston and Hartgraves, 2002). For example, a number of commentators have argued that US GAAP was responsible in part for the Enron debacle; Enron adopted accounting rules for consolidation which allowed it to keep Special Purposes Entities' activities off-balance sheet and separate from Enron's financial statements[46] (Wilson and Campbell, 2003). After the Enron scandal occurred, a sizeable number of commentators called for more stringent disclosures about FIs. For example, Chalmer and Godfrey (2004) examined the corporate usage of FIs and associated disclosures and concluded that tighter accounting regulation for FIs is needed.

As a result of the increasing number of financial failures and scandals involving FIs during the last two decades, the level of public concern about the use of FIs and the control of their

[46] According to US GAAP, where an independent third party has control of a substantial equity stake in an SPE, there is no need to consolidate; this substantial interest is defined as at least 3% (FASB, 1997)

associated risks has increased (Li and Gao, 2007)[47]. Hence, major accounting regulators, including FASB[48] and the IASB, have sought to issue new accounting standards and tighter regulations to tackle this dilemma (Richie et al., 2006). In this regard, Chau et al. (2000) argued that at the time of these scandals, accounting for FIs needed to consider three major issues: recognition, measurement, and disclosure. These issues are not substitutes for each other and accounting researchers should consider all of them when investigating this area (Ahmed et al., 2006). In keeping with this view, major accounting bodies have followed this classification when issuing standards that account for FIs; they have published accounting standards which are concerned with all of these issues. The main focus of the current research is on FI disclosures. To that end, the remainder of this chapter provides a comprehensive review of FI disclosures and their value relevance.

3.3 Financial Instruments Disclosure in Accounting Standards

Disclosure on FI matters is considered to be one of the most important items of financial information provided in the annual reports due to its influential impact on a firm's financial position and performance (Johnson et al., 1994). Disclosure issues associated with FIs primarily focus on the attributes of FIs that should be reported in the financial statements and how much information is necessary in order to enhance users' understanding of the risks involved with these products (Li and Gao, 2007). Accounting standards have sought to enable users to assess the nature and magnitude of risks associated with FI usage by firms (Chau et al., 2000). However, DeMarzo and Duffie (1995) have suggested that

[47] Other studies suggested that the expansion in the use of fair values to estimate financial assets and liabilities has largely contributed to such scandals and have worsened the 2008 financial crisis (Bengtsson, 2011). Specifically, critics have decried the use of fair value accounting as a negative factor which has exacerbated problems in the credit markets (Herz, 2008).

[48] The IASC issued its first conceptual framework in 1989 entitled "Framework for the Preparation and Presentation of Financial Statements"; this drew heavily on FASB's conceptual framework (Mardini, 2012). In particular, the IASB's conceptual framework reaffirmed FASB's primary objective of financial reporting (decision usefulness) and the qualitative characteristics of useful accounting information (relevance, faithful representation, comparability, understandability, materiality and cost-effective)

disclosing information about FIs to shareholders, especially on a company's hedging activities and their associated risk, is a sensitive issue. For example, Young (1996) pointed out that although the enhancement of disclosure about FIs has several advantages, firms are worried about supplying details of their hedging policies to competitors; he suggested that FI disclosure should (i) provide reliable and clear information which is considered essential for the functioning of an economic system; (ii) enhance the visibility of derivative instruments and their risk in the financial statements and thereby facilitates better decision-making by investors, creditors, and regulators; (iii) allow executives' risk management policy to be evaluated; and (iv) aid the efficient functioning of derivative markets.

The dramatic growth in the use of FIs, together with the publicity surrounding high-profile financial debacles, has led to significant calls for more stringent accounting regulations in this area (Beresford, 1997; Grant and Marshall, 1997; Dunne, et al., 2007; Li and Gao, 2007; Ighian, 2012). Accordingly, accounting standard-setters have embarked on a project to develop and expand FI disclosure requirements to answer these calls (Wang et al., 2005; Richie et al., 2006). Table 3.3 highlights the accounting standards associated with FI disclosure issued by the main accounting bodies such as FASB and the IASB. Panel A of this table reveals that FASB began its work to enhance the provision of FI information during the 1980s when it issued its first pronouncement about FIs disclosure, SFAS 105. Subsequently, FASB has sought to improve the usefulness of publicly available information about FIs with significant revisions to its requirements during the 1990s. Hence, it issued a number of consecutive standards concerning FI disclosures, namely: SFAS 107, SFAS 119, SFAS 133, SFAS 140, SFAS 150, SFAS 157, SFAS 161 and SFAS 166. Wang et al. (2005) argued that these pronouncements were aimed at increasing the information provided on the derivatives notional principal amount, credit exposure, fair

value, and any gains or losses on the instruments. Specifically, these statements required firms to report both qualitative and quantitative information in order to enhance investors' decision-making. For instance, SFAS 107 expanded existing fair value disclosures by mandating firms to disclose the fair value of all FIs including those recognised and unrecognised in the financial statements. In 1998, FASB issued SFAS No. 133 which was considered quite controversial[49]; it required companies to measure all FIs on their balance sheet at fair value. The statement was issued as a result of past significant losses involving derivative products and tried to limit corporate hedging to risk management rather than earnings management (Ighian, 2012). According to SFAS 133, all derivatives should be reported at fair value as an asset or liability and hedge accounting may be applied if there is hedge documentation starting at the inception of a hedge which explains how the hedge will work and how effectiveness will be measured. In 2008, SFAS 161 was issued; it amended and enhanced the requirements of SFAS 133. The primary objective of SFAS 161 was to improve disclosures about derivatives and hedging instruments and thereby provide users with a degree of transparency and understanding of how and why a firm uses derivatives, how derivatives are accounted for, and how derivatives affect an entity's financial position, performance and cash flows. Finally, SFAS 166 restricts the circumstances in which a financial asset must be derecognised when one entity (the transferor) has not transferred the entire financial asset to another by taking into consideration the transferor's continuing involvement with the financial asset. In addition, the statement removed the conditions of a qualifying special purposes entity which was embedded in SFAS 140.

[49] The initial response to SFAS 133 was largely negative. For example, Osterland (2001) argued that over two-thirds of survey respondents indicated that SFAS 133 imposed an excessive burden on reporting companies, particularly with regard to the extensive information required about hedge accounting.

Table 3.3: Accounting Standards Associated with FI Disclosure

Standard	Title	Issued	Effective	Application	Main provisions
Panel A: Standards Issued by FASB					
SFAS 105	Disclosure of Information about FIs with off-balance-sheet Risk and FIs with Concentrations of Credit Risk	1990	1991	US firms	Firms were required to report the face, contract or notional principal amount of FIs with off-balance-sheet risk
SFAS 107	Disclosure about Fair Value of FIs	1991	1993	US firms	Firms were required to report the fair value of all FIs
SFAS 115	Accounting for Certain Investments in Debt and Equity Securities.	1993	1994	US firms	Firms were required to disclose information about investments in equity securities that have readily determinable fair values
SFAS 119	Disclosure about Derivative FIs and Fair Value of FIs	1994	1995	US firms	Firms were required to provide disaggregated notional value disclosures of FIs (e.g., asset versus liability positions)
SFAS 133	Accounting for Derivative Instruments and Hedging Activities.	1998	2001	US firms	All FIs information to be recognised either as assets or liabilities and to be disclosed in the financial statements.
FFR 48	Disclosure of Accounting Policies for Derivative FIs and Commodity Instruments and Disclosure of Quantitative and Qualitative Information about Market risk Inherent in Derivative Financial Instruments and other FIs.	1997	1998	US firms	Firms were required to report in-depth quantitative information about market risk of FIs usage and advanced risk analysis such as Value-at-Risk and sensitivity analysis
SFAS 140	Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities	2000	2001	US firms	Firms were required to provide information about transfers and servicing of financial assets and extinguishments of liabilities.
SFAS 150	Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.	2003	2004	US firms	Firms were required to distinguish in classifying and measuring FI with characteristics of both liabilities and equity
SFAS 157	Fair Value Measurements	2006	2007	US firms	It emphasises that fair value is a market-based measurement and expanded Fair value disclosures about FI
SFAS 159	The Fair Value Option for Financial Assets and Liabilities.	2007	2008	US firms	It expanded the fair value option to include other types of FI
SFAS 161	Disclosures about Derivatives Instruments and Hedging Activities.	2008	2009	US firms	Firms were required to publish further information about derivatives and hedging activities
SFAS 166	Accounting for Transfers of Financial Assets	2009	2010	US firms	Firms were to disclose information about transfers of financial assets
Panel B: Standards Issued by the ASB					

FRS 13	Derivatives and Other FIs	1998	1999	UK firms	Firms were required to report narrative and numerical disclosure about FIs and their associated risks
FRS 25	FIs: Disclosure and Presentation	2004	2010	UK firms	Entities were required to provide a range of primarily risk-based qualitative and quantitative disclosures about the FIs.
FRS 29	FIs: Disclosure	2005	2009	UK firms	Firms are required to report information on the significance of FIs for an entity's financial position and performance and information about exposure to risks arising from FIs
Panel C: Standards Issued by the IASB					
IAS 30	Disclosures in Financial Statements of Banks and Similar Financial Institutions	1990	1991	All financial firms apply IAS/IFRS	All FIs and their associated risk exposures must be disclosed in the financial statements
IAS 32	FIs: Disclosure and Presentation	1995	1996	All Firms that apply IAS/IFRS	Information about the significance of FIs, accounting policies and associated risks was required to be disclosed
IAS 39	FI: Recognition and Measurement	1998	2001	All firms that apply IAS/IFRS	All FI should be recognised on the balance sheet including derivatives. They are initially measured at cost and are then regularly revalued to reflect their fair value
IFRS 7	FIs: Disclosure	2006	2007	All firms tha tapply IAS/IFRS	All FIs must be disclosed in the financial statements including comparable fair value information. Qualitative and quantitative information about the nature and extent of risks arising from FIs usage were required as well
IFRS 9	Financial Instruments	2009	2015	All firms that apply IAS/IFRS	The standard is still under review and it is expected to bring new requirement in terms of accounting for FI such as classifying and measuring financial assets. The standard will replace IAS 39 when is becomes effective

Notes: This table provides details about accounting standards relating to FIs which issued by the major accounting regulatory bodies around the world.

In the UK, Panel B of Table 3.3 indicates that the ASB has also issued a number of standards to cope with the demand for increased disclosure on FIs usage. For example, it issued FRS 13; the reporting requirements of FRS 13 involve qualitative and quantitative aspects. In this regard, Dunne et al. (2003) highlighted that, by issuing FRS 13, the ASB hoped that qualitative information would help stakeholders assess the role of FIs in the overall risk management strategy of a company. Regarding quantitative disclosures required by FRS 13, the objective was to reveal how policies for holding or issuing FIs had been implemented as well as an evaluation of the magnitude of significant exposures (Abraham and Cox, 2007). Chau et al. (2000) argued that UK standards on FI disclosure during this period were similar to those issued by the IASB; any differences were relatively small. For example, FRS 13 was similar to IAS 32 except that no information on hedges of expected future transactions was required under FRS 13. From 1st January 2005, FRS 25, which implements IAS 32, replaced the disclosure requirements of FRS 13 (FRC, 2007). However, for accounting periods on or after 1st January 2007 the reporting requirements of FRS 29 replaced the requirements of FRS 25 (FRC, 2005). Indeed, FRS 29 has the effect of implementing the disclosure requirements of IFRS 7 (FRC, 2007).

Panel C of the table points out that the IASB introduced several accounting standards to deal with FIs, namely: IAS 30, IAS 32, IAS 39, IFRS 7 and IFRS 9[50]. As the current study focuses on the disclosure standards applied by Jordanian listed firms, the remainder of this section concentrates on the specific standards associated with FI disclosure (particularly,

[50] In 1998, the IASB introduced IAS 39 which gave rise to a great deal of debate and controversy due to the complexity of its requirements (Helliar et al., 2004; Helliar and Dunne, 2004). The standard required that: (i) all FIs should be recognised on the balance sheet; (ii) all FIs should be measured at fair value; and (iii) hedge accounting activities are allowed. In 2009, the IASB issued IFRS 9: Financial Instruments; the standard is still under review and is expected to bring forward new requirements in terms of accounting for FIs in the classification and measurement of FIs. The standard will replace IAS 39 when it becomes effective in 2015.

IAS 30, IAS 32 and IFRS 7) which were issued by the IASB; since 1997, IASs from this standard setter have applied in Jordan.

The IASB issued its first accounting standard on FI disclosure in 1990 when IAS 30 became effective. This standard prescribed a specific presentation for FIs disclosure by financial institutions in order to provide users with appropriate financial statement information which would describe the ways that these organisations managed and controlled liquidity as well as solvency risks; indeed, it required full disclosure on a broad spectrum of risks associated with the operations of banks (IAS 30, Para, 1-4). In addition, the standard included some specific disclosure requirements for banks and financial institutions on FI matters: (i) assets and liabilities should be grouped by nature and listed in descending order of liquidity; (ii) the fair value of each class of FI should be provided; and (iii) losses on loans and advances should be disclosed so that risk exposures associated with FI usage would be conveyed[51] (IAS 30, Para. 8-40).

In 1995, the IASB issued IAS 32 which dealt with all types of FIs (recognised and unrecognised) with certain exceptions[52]. The main objective of IAS 32 was to ensure that companies provided information that enhanced users' understanding of the impact of FIs usage on an entity's financial position, performance and cash flows (IAS 32, Para. 1). According to IAS 32's disclosure requirements, for each class of FI an entity should disclose: (i) information about the extent and the nature of the FI, including significant terms and conditions that might affect the amount, timing and certainty of future cash

[51] In addition, other information was mandated. For instance, details on specific contingencies and commitments, concentration of FI, general bank risks and assets pledged as security also had to be provided.

[52] These exceptions are: (i) share-based payments (IFRS 2); (ii) interests in subsidiaries (IAS 27); (iii) interests in associates (IAS 28); (iv) interests in joint ventures (IAS 31); (v) employers' right and ligations under employee benefits plan (IAS 19); (vi) rights and obligations arising under insurance contracts (IFRS 4); and (vii) contracts for contingent consideration in a business combination (IFRS 3).

flows[53]; (ii) significant accounting policies on the recognition and measurement of the FI employed; (iii) disclosures about risk management policies, including financial risks and hedging activities associated with FI usage (interest rate risk and credit risk); and (iv) the fair value for each class of FI (IAS 32, Para. 51-95). In general, IAS 32 and IAS 30 were not comprehensive enough to encompass all types of FI and their associated risks (Conti and Mauri, 2006). In this regard, Richie et al. (2006) argued that it was widely recognised in both the private and public sector that accounting standards and disclosure practices for FIs needed to be improved.

Most recently, the IASB issued *IFRS 7*[54]*: Financial Instruments: Disclosure*, in 2006; IFRS 7 replaced FI disclosure requirements which had previously been contained in both IAS 30 and IAS 32 (IASB, 2006). The primary objective of IFRS 7 is to provide risk management and financial instrument disclosures that enable users to evaluate the significance of financial instruments to an entity's financial position and performance (IASB, 2006). IFRS 7 reiterated the definition of FIs that was stipulated in IAS 32. However, IFRS 7 requires companies to publish their FIs under specific categories in the financial statements according to whether they are derivative or non-derivative[55]. By 2007, IFRS 7 had to be applied by all listed firms (financial and non-financial); it covered all types of FIs as well as the risks arising from the use of FIs (IASB, 2006b). In fact, IFRS 7 expands the scope of FI disclosure considerably over the requirements that were specified in the previous standards (Coetsee, 2010a). In particular, IFRS 7 requires firms to provide two main categories of FIs disclosure. First, an entity must provide information about the significance of FIs including:

[53] For instance, principal or notional amounts, dates of maturities or execution, conversion options, amounts and timing of future receipts or payments, collateral held and covenants.
[54] Following the introduction of IFRS 7, IAS 30 is superseded and IAS 32's disclosure requirements replaced while IAS 32's presentation requirements remained.
[55] These categories are: (i) FI at fair value through profit or loss - held for trading; (ii) FI at fair value through profit or loss – designated; (iii) Held-to-maturity investments; (iv) available-for-sale financial assets; (v) loans and receivables; and (vi) ffinancial liabilities measured at amortised cost.

(i) accounting policy disclosures; (ii) balance sheet disclosures; (iii) income statement disclosures; (iv) hedging disclosures; and (v) fair value disclosures (IFRS 7, Para. 7-29). Second, an entity must provide information about the nature and extent of risks arising from the use of FIs including: (i) qualitative disclosures about risks associated with FIs; and (ii) quantitative disclosures of risks associated with FIs usage including all types of risks, namely: credit risk, liquidity risk and market risk[56] (IFRS 7, Para. 30-42).

IFRS 7 represents one of the most significant changes in accounting for FIs since the introduction of IAS 39 (Conti and Mauri, 2006); the new standard has greatly increased the amount of detailed disclosure of numerical information surrounding FIs as well as requiring new qualitative disclosures. Indeed, IFRS 7 made a number of changes as to how firms should account for FIs relative to its predecessors (Bischof, 2009). First, the standard takes a management approach whereby information about FIs and their associated risk should be based on information provided internally to the entity's key management personnel (Ernst & Young (2008). It was thought that this development would enhance the integration between the internal and external reporting systems within firms. For example, Conti and Mauri (2006) argued that by implementing IFRS 7, firms could draw up one unified risk report expressly devoted to risk disclosure which removes the excessive fragmentation of information about FIs in financial reports provided under previous risk disclosure requirements; the authors suggested that this change should increase investors' confidence in the reported disclosures. Second, IFRS 7 takes a primarily qualitative approach to risk disclosure concerning FIs since a major part of its requirements relates to the provision of non-numerical information. In particular, firms must provide qualitative narrative information about all risk exposures that a firm is exposed to (Bischof, 2009); narrative information on risk can help investors to determine the risk profile of a company, the

[56] IAS 32 requires firms to disclosure information about interest rate risk and credit risk only.

estimation of market value, and accuracy of security price forecasts (Linsley and Shrives, 2000; Beretta and Bozzolan, 2004; Helliar and Dunne, 2004; ICAS, 2005).

Third, the standard reviews existing FI disclosure requirements which were embedded in IAS 30 and IAS 32 and removes any duplicative requirements (Scott and Yeoh, 2006). Fourth, IFRS 7 simplifies the disclosures about the concentration of risks associated with FI usage – that were provided primarily under IAS 32. For example, the standard requires firms to report the concentration of risk for each class of FIs so that each type of risk (market, credit and liquidity) can be linked to a specific class of FI. Fifth, IFRS 7 requires comparative information to be disclosed on FIs and their associated risks; such a requirement had not been explicitly stated in the previous standards in the area. Sixth, the standard applies to all companies irrespective of their industry or size; the significance of FIs to an entity's financial position and performance is the main determinant of FI disclosures. Previous accounting standards were directed at specific industries; for example, while IAS 30 was enacted mainly for financial firms, non-financial firms had to apply IAS 32. Indeed, Gornik-Tomaszewski (2006) has argued that the most important of the changes mandated by IFRS 7 is that the level of disclosure is determined by the extent to which an entity uses FIs rather than its industrial sector.

Finally, IFRS 7 adds new disclosures about FIs to those that were required under previous standards: namely, (i) quantitative information on exposures to the relevant financial risk at the reporting date based on information provided internally to key management personnel within the entity; (ii) sensitivity analysis for each type of market risk to which an entity is exposed at the reporting date; (iii) disclosure about the credit quality of financial assets that are neither due nor impaired; (iv) various disclosures for financial assets that are either due

or impaired; (v) information about the carrying amounts for each class of FI; and (vi) details on the ineffectiveness of any hedge (Gornik-Tomaszewski, 2006). Thus, it is expected that IFRS 7 may have a positive impact on the usefulness of FI disclosure and the value relevance of FI-related information provided to the capital markets (Bamber and McMeeking, 2010). Indeed, Nelson et al. (2008) suggested that the adoption of IFRS 7 has had a positive impact on disclosure quality for European large banks. Most recently, Bischof (2009) argued that IFRS 7 has enhanced the level of transparency in the banking industry.

3.4 Empirical Studies on FIs Disclosure

Financial statements are one of the most important channels of communication whereby firms can report their financial information to outsiders (Lee and Tweedie, 1979; Arnold and Moizer, 1984; Bartlett and Chandler, 1997; Beattie et al., 2004; Bushman and Landsman, 2010; Christensen, 2010). For example, Levitt (1998) argued that concerns about the usefulness of financial statement information have resulted in pressure groups lobbying accounting standard-setters to require greater details and more extensive information particularly concerning FIs. Specifically, he stated that:

> "High quality standards should result in high quality financial reports and as a result investors' confidence in the credibility of annual reports is enhanced. Accordingly, firms that comply with the accounting standards would be expected to produce high quality financial reporting" (p. 80)

The accounting literature is replete with different interpretations of the term "quality" as it applies to accounting information. For example, Pownall and Schipper (1999) indicated that quality financial reporting should meet three characteristics: transparency,

comparability and full disclosure[57]. Indeed, the IASB's own conceptual framework (IASB, 2006a) stated that the main objective of financial information is to provide investors with information that is useful for their decision-making needs. It affirmed that decision-useful information should possess certain characteristics, namely: relevance, reliability, comparability and materiality. This suggests that the quality of financial reporting depends on the extent to which information is useful for information users (Hassan and Mohd-Saleh, 2010). However, Ball et al. (2003) argued that quality is an elusive concept especially when there are myriad uses for accounting information.

In terms of the assessment of the "usefulness" of corporate disclosure, a variety of measures have been used in the extant accounting literature. For instance, Behavioural Accounting Research[58] (BAR) has depended on the perceptions of users and preparers of the financial statements (e.g. Lee and Tweedie, 1979; Arnold and Moizer, 1984; Bartlett and Chandler, 1997; Mardini, 2012), the level of disclosure[59] (e.g. Singhvi and Desai, 1971; Firth, 1979; Woods and Marginson, 2004; Finningham, 2010; Mardini et al., 2012), and/or disclosure rating provided by accredited agencies such as AIMR, CIFAR, and FAF[60] (e.g. Sengupta, 1998; Kothari et al., 2009); the last two techniques typically measure the quantity of information which is included in the financial statements as a result of requirements laid

[57] *Transparency* means that financial statements should reveal the events, transactions, judgements and estimates underlying them and their applications. *Comparability* means that similar transactions and events are accounted for in the same manner, both cross-sectionally across firms and over time for a given firm. *Full disclosure* refers to the provision of all information necessary for decision-making (Pownall and Schipper, 1999).

[58] The extant literature in financial reporting considered studies that employ disclosure indices as part of behavioural accounting research (Bebbington et al., 2001); they argue that accounting details gathered by disclosure indices represents information prepared by human beings in an accounting context. The disclosure index measures whether companies publish the information (items) laid down by the accounting standards.

[59] The extant literature on financial reporting considers that studies which employ disclosure indices are part of behavioural accounting research (Dyckman et al., 1976). it suggests that accounting data aggregated in disclosure indices represents information prepared by human beings in an accounting context.

[60] AIMR: the Association for Investment Management Research; CIFAR: the Center for International Financial Analysis and Research; FAF: Financial Analyst Federation.

down by standard-setters (Beattie et al., 2004). The Market-Based Accounting Research (MBAR) approach, on the other hand, has employed capital market measures (share prices, return, and trading volume) to assess whether accounting information is value relevant (Ball and Brown, 1968; Archibald, 1972; Ball, 1972; Beaver and Dukes, 1973; Barth, et al., 1996; Venkatachalam, 1996; Hassan et al., 2006a; Li and Gao, 2007; Hassan and Mohd-Saleh, 2010). The current study employs both BAR by examining the level of FI disclosure provided in the financial statements based on the requirements of the accounting standards examined and MBAR by testing the association between FI disclosure and firm value.

In terms of FI disclosure, the extant empirical research can be divided into two categories: (i) studies conducted in developed countries; and (ii) studies conducted in developing countries. The remainder of this section focuses on discussing the findings from these two categories of research.

3.4.1 Studies on FI Disclosure Conducted in Developed Countries

FIs are deemed to be an important component of financial statements (Bischof, 2009). Specifically, Bischof (2009) has argued that FIs account for, on average, up to 90% of total assets and liabilities in the financial statements. Dunne et al. (2008) agrees with this view; in their investigation of the implementation of IFRS in the UK, Ireland and Italy, the authors found that FI disclosure relating to IFRS 7 and IAS 32 accounted for a large proportion of the extra additional information provided by firms when complying with the new GAAP. Therefore, FI information is expected to (i) be a material component of a firm's disclosure level; and (i) influence the capital markets (Bischof, 2009). To date, most empirical studies on FI disclosure are mainly focused on developed countries (i.e. US, UK, Australia) and have overlooked developing countries (Hassan and Mohd-Saleh, 2010).

These studies can be divided into two main streams; namely: (i) studies about FI disclosure (derivatives and non-derivatives); and (ii) studies on risk disclosure associated with FI usage. The next two sub-sections survey these studies.

3.4.1.1 Studies on FI Disclosure

A growing body of empirical accounting research has investigated FI disclosure in developed countries such as the US (e.g. Goldberg et al., 1994; 1998; Palmer and Schwarz, 1995; Mahoney and Kawamura, 1995; Edwards and Eller, 1995; Hamlen and Largay, 2005; Zhang, 2009), the UK (Dunne et al., 2004; Woods and Marginson, 2004; Bamber and McMeeking, 2010), Australia (Berkman et al., 1997; Chalmers and Godfery, 2000 Chalmers, 2001), and other EU countries (Lopes and Rodrigues, 2006; 2008; Bischof, 2009; Bamber and McMeeking, 2010; Prihatiningtyas, 2011; Gebhardt, 2012). Table 3.4 summarises key features of these studies. An inspection of this table shows that most of these studies have (i) focused on the information provided about derivative products and overlooked other types of FIs; (ii) analysed disclosures in the annual reports of companies; (iii) used either the disclosure index technique or the content analysis method; and (iv) investigated the change or the usefulness of information provided following the introduction of new accounting standards concerning FIs.

A comparison of the findings from these studies is not easy. For instance, the investigations use different sample sizes ranging from a few companies [only 10 annual reports for Edwards and Eller, 1995] to 600 firms (Gebhardt, 2012). In addition, some of the studies are sector-specific and concentrate on banking (Edwards and Eller, 1995), industrial companies or firms from the manufacturing industry (Hamlen and Largay, 2005). Others are more general and include both financial and non-financial firms (Lopes and Rodrigues,

2006; 2008). Furthermore, these studies examine the impact of a variety of accounting standards on FI disclosure. Nevertheless, despite these differences, a number of findings emerge from an analysis of these investigations.

Panel A of Table 3.4 lists US studies concerning FIs disclosure. In general, these studies have concluded that the introduction of new accounting standards covering FI disclosure has resulted in more detailed information being provided. Prior to the existence of FI-related regulation, Goldberg et al. (1994) argued that information about FI was very limited. However, in 1990 when SFAS 105 was issued, firms were required to disclose the contract or notional principal amount of off-balance sheet FIs outstanding at the balance sheet date where there was a risk of an accounting loss. Goldberg et al. (1994) found that SFAS 105 enhanced the hedging information provided by forcing firms to publish significant details about their hedging activities. However, Palmer and Schwarz (1995) found that SFAS 105 had a negative impact on the clarity of the information disclosed; they argued that information about FI in general, and about the risk associated with FI usage in particular, became difficult for users to understand. In 1991, the FASB issued SFAS 107 which concentrated on the fair value of FIs. Goldberg et al. (1998) compared disclosures about foreign exchange derivatives under SFAS 105 and SFAS 107. They pointed out that although there was widespread compliance with the requirements of SFAS 105 and SFAS 107, the disclosures varied greatly in terms of both form and content with inconsistency in terminology being particularly evident.

In order to enhance derivative disclosures, FASB issued SFAS 119 in 1994; this statement was greeted with a great deal of expectation. As a result, a number of studies were dedicated to investigating its influence (Edwards and Eller, 1995; Mahoney and Kawamura,

1995; Kawamura, 1995; Herz et al., 1996). These studies concluded that most entities complied with the disclosure requirements of the standard outlining FI disclosure requirements. They suggested that SFAS 119 was moderately effective, allowing the readers of financial statements to make judgments on whether FIs could have a material impact on a firm's financial position and performance. Further, they documented that the amount of detail presented and the clarity of the information (both quantitative and qualitative) provided in annual reports about derivative activities had greatly improved for the whole sample with the introduction of SFAS 119 relative to what had been supplied beforehand. However, they pointed out that some firms' disclosures appeared incomplete, particularly with respect to trading matters and hedges of anticipated transactions. For example, Mahoney and Kawamura (1995) investigated the impact of SFAS 119 on the FI information provided by firms by reviewing the content of the 1994 annual reports for a random sample of Fortune 1000 firms against a checklist of required disclosures. The findings revealed that although most entities provided disclosures in response to the requirements of SFAS 119, some firms' disclosures appeared incomplete or less detailed than required. The study identified that items with the lowest level of disclosure included trading derivatives and hedges of anticipated transactions). Adopting a similar approach, Edwards and Eller (1995) examined the usefulness of FI disclosure for the same standard (SFAS 119); they compared the reported disclosure of FI data pre- and post- the introduction of SFAS 119. In general, they concluded that SFAS 119 had contributed to an increase in both disclosure level and overall transparency.

In order to improve further on the disclosure of information about FIs, the US SEC issued Financial Reporting Release (FRR) No. 48 in 1997. The introduction of this new pronouncement witnessed the publication of several empirical studies that investigated its

influence on FI disclosure. For example, Roulstone (1999) and Blankley et al. (2000) investigated the influence of FRR 48 on the level of FIs information supplied by comparing disclosures before and after FRR 48 was adopted. The findings revealed that, in general, the level of FI disclosures improved in the period of their studies but there was still room for improvement in terms of details provided about quantitative measures of risk information. Specifically, they found that (i) the primary qualitative disclosure weakness was in the discussion of risk management practices; these discussions were brief and vague and often did little to help the reader determine the risk management strategies and goals of the registrant; and (ii) a lot of the detailed quantitative and qualitative disclosures about items such as sensitivity analysis and value-at-risk analysis of market risk disclosures were not made. By and large, both studies found that more FI information was now provided but they recommended stronger and more detailed disclosure regulations.

In order to align FI disclosure requirements more closely with issues of FI recognition, measurement and hedge accounting, FASB issued SFAS 115 and SFAS 133 (Hernandez, 2003). While SFAS 115 related to accounting for some investments in debt and equity securities, SFAS 133 addressed the issue of accounting for derivative instruments and hedging activities. Hodder et al. (2001) investigated the impact of SFAS 115 on banks' disclosure practices and found that banks incurred real costs in making accounting choices under SFAS 115; hence, they found that most disclosures were not complete[61]. Following the introduction of SFAS 133, Bhamornsiri and Schroeder (2004) and Hamlen and Largay (2005) investigated the derivative reporting practices of 30 high profile companies included in the Dow Jones Industrial Average Index. They found that the amount of disclosure

[61] The study found that: (i) banks classified few securities available for sale relative to estimated benchmarks; and (ii) weaker banks that adopted the standard early classified far more securities as available for sale relative to benchmarks (Hodder et al., 2001).

provided about derivatives had increased significantly after SFAS 133 was implemented. Specifically, 90% of sample firms complied with SFAS 133's requirements; as a result, financial statement users were able to assess these company's strategies for using derivative products. However, they suggested that there were some inconsistencies in meeting the quantitative requirements of SFAS 133. Thus, financial statement users were not always able to assess the outcomes of these company's strategies for using derivative FIs. For example, they highlighted that the information published about derivative FIs held by the sample of companies was scattered throughout the annual reports, hard to understand, difficult to follow and lacked uniformity in the reporting formats employed. The authors concluded that it would take a great deal of time for a reasonably informed reader of the financial statements to gather and analyse the information relating to a company's use of derivatives, and therefore the required level of financial transparency on the use of derivative FIs was not being achieved. Accordingly, it was recommended that a more uniform reporting format was essentially needed.

Adopting a different perspective, Zhang (2009) examined the effect of SFAS 133 on corporate risk management behaviour. The study classified a derivative user as an effective hedger if its risk exposures decreased after the initiation of its derivatives activity and as an ineffective hedger otherwise. The study found that volatility of cash flows and risk exposures relating to interest rates, foreign exchange rates, and commodity prices decreased significantly for ineffective hedger firms but not for effective hedger firms. Specifically, the mean and median changes in interest rate risk exposure for effective hedger firms after SFAS133 were 0.05 and 0.03 with p-values greater than 0.05, while the mean and median changes in the risk exposure for the ineffective hedger firms after SFAS133 were 0.35 and

0.19 with p-values of less than 1%. Hence, Zhang (2009) suggested that ineffective hedger firms engaged in more prudent risk management activities after the adoption of SFAS 133.

Panel B of Table 3.4 lists the UK studies on the impact of accounting standards for FI disclosure (Woods and Marginson; 2004; Dunne et al., 2004; Bamber and McMeeking, 2010). In order to enhance FI disclosure, the ASB introduced FRS 13 in 1998. Woods and Marginson (2004) were one of the first to analyse the 1999 annual reports of UK banks in order to assess the impact on derivatives disclosures from the adoption of FRS 13. The findings revealed that the narrative disclosures provided were fairly generic in nature, while the numerical data was either incomplete or misleading for users. In a follow-up study, Dunne et al. (2004) investigated the implementation of this standard for a larger sample of FTSE 100 non-financial companies and found that: (i) the implementation of FRS 13 contributed to an increase in derivatives-related disclosure in the sampled annual reports; specifically, the total number of pages devoted to such disclosure was more than tripled from a median of 0.76 to a median of 2.50 and the average difference of 1.80 was significant at the 5% level[62]. They concluded that the usefulness of derivative reporting increased and provided stakeholders with useful information about these instruments.

[62] The increase was largest for the "*objectives, accounting policies and strategies*" and "*interest rate risk*" categories with a median difference of 0.44 and 0.44, respectively. However, the smallest was for the "*hedging accounting*", "*certain commodity contracts*", "*market prices risk*" and "*general other*" categories with a median difference of 0.00 between pre- and post- the implementation of FRS13 (Dunne et al., 2004).

Table 3.4: Key Features of Extant Empirical Studies on FI Disclosure in Developed Countries

Author (s)	Method	Sample Size	Standard	Industry
Panel A: Studies on FI disclosure Standards in the US				
Goldberg et al. (1994)	Content analysis	438	SFAS 105	FNF
Goldberg et al. (1998)	Content analysis	104	SFAS 105/107	FNF
Palmer and Schwarz (1995)	Content analysis	35	SFAS 105	Banking
Mahoney and Kawamura (1995)	Content analysis	65	SFAS 119	FNF
Edwards and Eller (1995)	Content analysis	10	SFAS 119	Banking
Kawamura (1996)	Content analysis	75	SFAS 119	FNF
Herz et al. (1996)	Questionnaire/ 10-K filing	67/78	SFAS 119	NF
Hodder et al. (2002)	Content analysis	230	SFAS 115	Banking
Bhamornsiri and Schroeder (2004)	Content analysis	30	SFAS 133	FNF
Hamlen and Largay (2005)	Content analysis	30	SFAS 133	Industrial
Zhang (2009)	Content analysis	225	SFAS 133	NF
Panel B: Studies on FI Disclosure Standards in the UK				
Woods and Marginson (2004)	Content analysis	9	FRS 13	Banking
Dunne et al. (2004)	Content analysis	78	FRS 13	NF
Bamber and McMeeking (2010)	Content analysis	100	IFRS 7	NF
Panel C: Studies on FI Disclosure Standards in Australia				
Berkman et al. (1997)	Content analysis	116/195*	ED-65 and FRS-31	FNF
Chalmers and Godfery (2000)	Questionnaire	150	AASB-1033	FNF
Chalmers (2001)	Disclosure index	140	AASB-1033	FNF

Hassan et al. (2006c)	Disclosure index	137	AASB-1033	Extractive industry
Panel D: studies on FI disclosure standards in other EU Countries				
Lopes and Rodrigues (2006)	Disclosure index	55	IAS 32/39	FNF
Lopes and Rodrigues (2008)	Disclosure index	50	IAS 32/39	FNF
Bischof (2009)	Content analysis	171	IFRS 7	Banking
Prihatiningtyas (2011)	Disclosure index	128	IFRS 7 and IAS 39	FNF
Gebhardt (2012)	Content analysis	600	IFRS 7 and IAS 39	NF

Notes**:** This table shows empirical studies that have investigated the accounting standards concerning FIs. AASB-1033: Presentation and Disclosure of Financial Instruments, issued by the Australian Accounting Standards Board (AASB), 1996; Exposure Draft: Financial Instruments: Disclosure and Presentation, issued by the Financial Accounting Standards Committee of the Hong Kong Society of Accountants, 1995. FNF: Financial and Non-Financial Firms, * this is a comparative study between New Zealand (106 firms) and Australia (195).

Responding to the adoption of IFRS GAAP by UK firms in 2005, Bamber and McMeeking (2010) investigated the impact of IFRS 7 in the first year of its adoption by FTSE 100 non-financial companies, using content analysis. The study found that the adoption of IFRS 7 caused companies to publish more accounting information (especially qualitative details) about FI usage which may have been useful for decision-makers in the assessment of a firms' overall strategy for managing these products; specifically, the number of firms which published FI-related information along with the quantity of disclosure provided were increased.

Panel C of Table 2.4 illustrates that a significant body of research has examined the impact of accounting standards on FI disclosure in Australia. Before any specific rules on FI information existed, Berkman et al. (1997) compared disclosure practices among New Zealand and Australian companies. They concluded that FIs were widely used by companies in both countries; hence they suggested that the impact of FI disclosure on financial statement users and on the market value of the firm was expected to be material. In terms of derivative disclosure, the findings showed that companies in both countries reported relevant information in their annual reports, but there was far more disclosure provided by New Zealand firms than by their Australian counterparts. The authors argued that this was largely due to the mandatory reporting requirements of FRS 31 in New Zealand compared to the voluntary proposals contained within Exposure Draft No. 65 in Australia.

Following the enactment of the AASB 1033 in Australia in 1996, FI disclosure requirements became mandatory; this change gave rise to a number of empirical studies which investigated the level of associated FI disclosure. For example, Chalmers and

Godfery (2000) examined firm disclosure about derivatives under AASB 1033 for 150 large Australian companies, using details from their 1998 annual reports. They found that although the level of FI disclosure increased, the quality of the information disclosed was less than satisfactory. In particular, the authors noted that: (i) the information was not easy to find as its positioning in the financial statement's notes varied within a firm and across firms; and (ii) there was considerable variation in disclosure phraseology. The authors suggested that these flaws hindered the understandability, comparability and consistency of FI information in the financial statements. Generally, the study raised a number of major weaknesses concerning existing FI disclosure requirements in Australia: (i) the lack of accounting policy disclosures relating to specific FIs; (ii) the incompleteness of fair value disclosures about FIs[63]; and (iii) the vagueness of many disclosures. In a follow-up study, Chalmers (2001) examined FI information published by firms under three disclosure regimes: pure voluntary disclosure (1992–94), coercive voluntary disclosure (1995–97) and mandatory disclosure in 1998. The findings highlighted that disclosure levels increased noticeably in 1995 and continued to rise in the beginning of the coercive period; this trend increased considerably after FI disclosure became mandatory. Specifically, the study noted that the number of firms disclosing information about FIs along with the level of FI disclosure had increased across the periods examined[64]. The author suggested that the growth in the number of firms disclosing FI information and the level of FI disclosure were most pronounced in the first reporting period of the coercive disclosure regime, suggesting that firms were responsive to quasi-contractual disclosure regulation.

[63] Although firms disclosed information about the fair value of financial instruments, they seemed reluctant to reveal the underlying assumptions and methods of measurement underpinning these disclosures.

[64] The number of firms that reported FI information increased as follows: 12(1992), 12 (1993), 23 (1994), 62 (1995), 72 (1996), 76 (1997) and 97 (1998). Further, the level of disclosure increased as follows: 1.82% (1992), 2.08% (1993) 4.65% (1994), 23.63% (1995) 28.43% (1996), 34.63% (1997) and 68.29% (1998).

More recently, Hassan et al. (2006c) investigated the transparency of derivative disclosures in the Australian extractive industry using annual reports from 1998 to 2001 which were all based on the requirements of AASB 1033. The authors found that the transparency of derivative disclosures among the sampled firms had increased over the period of the investigation. Specifically, the study revealed that the level of derivative disclosure increased from 85% in 1998 to 91% in 2001 with an overall compliance level of 88%. However, they contended that firms still treated the disclosure of derivative information as discretionary, particularly in relation to net fair value information about FIs. In general, these three studies concluded that even though the disclosure level had increased in Australia with the introduction of new standards, evidence suggested that there was a high level of non-compliance among the sampled companies. The results suggested that improvements in FI disclosure occurred primarily when the provision of such information was mandated by accounting regulations. They highlighted the importance of enforcement power for ensuring some degree of compliance with accounting regulation. Therefore, the authors called on Australian standard-setters to mandate more specific disclosures about FIs.

The findings of studies from the US, the UK and Australia have led researchers in other countries to investigate actual FI disclosure practices compared to the requirements specified in IFRS GAAP (Lopes and Rodrigues, 2007; 2008; Bischof, 2009; Gebhardt, 2012). Panel D of Table 2.4 summarises key features of studies on FIs disclosure conducted in EU countries other than the UK. For example, Lopes and Rodrigues (2007) investigated existing measurement and disclosure practices for FIs among Portuguese listed companies to gauge the extent of their compliance with IAS 32 and IAS 39. In general, the study found that Portuguese disclosure practices for FIs differed substantially from the requirements in

IAS 32/39. In particular, they noted that the overall level of FI disclosure among their sample firms was less than satisfactory; the non-disclosing percentage was 27% for financial firms and 95% for non-financial firms. In addition, they discovered that fair value measurement of derivatives was adopted by most derivative users (73%). As a result, they concluded that the gap between existing accounting practices in Portugal and the relevant accounting standards was quite wide while the level of hedging disclosure was very low (13%). The authors suggested that the mandatory adoption of more stringent standards (e.g. IAS 32/39) would probably have a positive impact on the FI-related information disclosed by Portuguese firms.

In a later study of large European listed companies for 2001, Lopes and Rodrigues (2008) found that the sampled firms, which had the most sophisticated information systems and the most advanced accounting practices, still had quite a long way to go in terms of accounting for FIs. They noted that: (i) about 50% of sampled companies used fair value for held-for-trading financial assets, but less than half of the firms adopted this criterion for available-for-sale financial assets as required by IAS 39; and (ii) a large proportion of companies disclosed fair value determination methods but the information was far from being clear and objective and prevent the fair value information from being relevant and useful.

In a comprehensive European study of this topic, Bischof (2009) investigated the impact of the first time adoption of IFRS 7 on FI disclosure using annual reports for 171 banks from 28 European countries. The study found that disclosure level about FIs (both qualitative and quantitative) among European banks increased in the financial statements. Specifically, she found that while financial statement information had increased from 69 pages before

IFRS 7 adoption to 75 pages afterwards, risk management reporting within the financial statements accounted for most of this change; it increased from 13 to 21 pages; both differences were significant with a p-value of less than 0.01. Hence, she concluded that FI-related disclosure had become more useful. This result is supported by the most recent evidence of Prihatiningtyas (2011) who has investigated the current hedge accounting disclosure practices for listed firms in the Netherlands based on the requirements of IFRS 7. The study found that firms have provided hedge disclosure in excess of the standard's requirements. More recently, using a sample of non-financial firms from 17 European countries, Gebhardt (2012) investigated FI disclosure practices based on the requirements of IFRS 7 and IAS 39 using content analysis. In general, the study provided evidence of the relevance of FIs for non-financial companies. In particular, the study found that (i) companies classified their FIs in the financial statements according to the classes identified with the standards; and (ii) most fair value measurements were assessed by reference to quoted prices for similar FI products (level 1) and directly observable market inputs (level 2); while only 10.3% of fair values were not based on observable market data.

With the enactment of IFRS 7, the focus of research has shifted towards risk disclosures associated with FI usage (Bischof, 2009). Indeed, corporate risk reporting is a cornerstone of accounting and investment practice (ICAEW, 1999). Hence, the next sub-section focuses on studies that have examined risk disclosure associated with FI usage.

3.4.1.2 Studies on Risk Disclosure associated with FIs Usage

In recent years, risk reporting has grown in importance within the financial reporting area (Dobler, 2008). Moreover, the risk management profile section within the annual report has become more prominent in financial statement analysis (Linsley and Shrives, 2006).

Indeed, Beretta and Bozzolan (2004) have argued that while firms should provide information about their risks, the quality of risk disclosure depends on both the quantity of information published and the richness of its content[65]. Specifically, they stated that:

> "The richness of information is a semantic property of disclosure about future prospects, that is, the richness determines whether or not the information helps outsider investors appreciate the expected impact of disclosed risks on the firm's capability to create value" (p. 266).

The extant literature indicates that firms can benefit from the publication of risk information in different ways. For instance, Linsley and Shrives (2006) argued that the provision of greater risk disclosures reduces the cost of debt finance as the suppliers of funds will be in a position to judge the firms' disclosure quality and remove the need for a risk premium within the cost of capital. In addition, risk disclosures help firms' managers to be more effective in their monitoring as they are better positioned to foresee potential problems and can therefore act early enough to avoid any financial distress (Schrand and Elliot, 1998). Moreover, risk disclosures may also motivate firms to improve their risk management capabilities in order to signal their quality to others in a situation characterised by information asymmetry (Flannery, 1986). In turn, effective risk management creates more stability within and across industries, hence results in a decrease in systematic risk (Taylor, 2011).

It is certainly the case that changing economic and regulatory environments, more complex capital structures, increasing reliance on FIs, the growth of international funding

[65] Botosan (2004) discussed the work of Beretta and Bozzolan (2004) which suggested a new approach for measuring the quality of risk-related corporate disclosures based on the quantity (the number of items) and the richness (forward looking information) of risk information. In particular, Botosan (2004) highlighted the extent to which such measures capture the quality of risk-related corporate disclosures by explaining whether such techniques capture the basic qualitative characteristics of accounting information (understandability, relevance, reliability and comparability) as set out by the IASB (1989) and FASB (1980). The paper concluded that while the quantity measures did not add anthing new to corporate disclosure, the richness measures needed further development.

transactions and prominent corporate crises have all focused increasing attention on risk reporting among both financial and non-financial firms (Beretta and Bozzolan, 2004; Linsley and Shrives, 2006). Specifically, stakeholders in general and shareholders in particular have wanted companies to report information concerning their future prospects and the sustainability of current value-creation drivers (Solomon et al., 2000). Indeed, institutional investors have argued that increased corporate risk disclosure can help their portfolio investment decision-making (Abraham and Cox, 2007). Therefore, investors have wanted to know whether firms' risks and uncertainties are well-managed; investors are looking for effective communication about firms' risks and the actions which management are taking in order to minimise these risks (Beretta and Bozzolan, 2004).

In terms of risk disclosure research, the published research has been rather limited to date (Pérignon and Smith, 2010); before recent changes in regulations, the publication of risk-related information remained at the discretion of individual company managements; no serious attempts were made to provide an explicit framework for such disclosures (Solomon et al., 2000; Dobler, 2008). Reviewing the extant literature, Stanton and Stanton (2002) concluded from their meta-study of published research of disclosure between 1990 and 2000 that no study had specifically examined risk disclosures. In keeping with this finding, Linsley and Shrives (2006) argued that despite the fact that the topic of risk reporting had recently received considerable attention in the financial arena, this had yet to be reflected in the empirical research examining firms' risk disclosures. Indeed, Beretta and Bozzolan (2004) argued that "risk reporting is just becoming a serious topic for research" (p. 268).

Over the last decade, a number of empirical studies examined voluntary risk reporting throughout the world including the UK (e.g. Solomon et al., 2000; Linsley and Shrives, 2005a; b; 2006; Linsley and Lawrence, 2007; Abraham and Cox, 2007), Italy (e.g. Beretta and Bozzolan, 2004), France (e.g., Combes-Thuelin et al., 2006), the US (e.g. Koonce et al., 2005), Canada (e.g. Pérignon and Smith, 2010), Australia (e.g. Taylor, 2011), and the Netherlands (e.g. Deumes, 2008). The findings of these studies have indicated that: (i) firms were not providing a complete picture of the risks they faced within their financial statements and a significant proportion of risk disclosures consisted of generalised statements of risk information policy[66]; (ii) there was minimal disclosure of quantified risk information and narrative information was more prevalent; (iii) investors believed that a complete risk profile of a company was very important in assessing the prospects and the value of a firm. What is more, these studies concluded that more formalised and comprehensive risk disclosures might be desirable in the future to effectively reduce information asymmetries between management and stakeholders. Thus, it can be argued that risk regulations are essential for companies to report this type of information in the annual reports for investors and other user groups.

Beretta and Bozzolan (2004) argued that the current regulation of risk reporting is incomplete as it emphasises certain types of risk (e.g. market risk) and neglects others. However, there are a number of risk-oriented accounting pronouncements which have been issued by regulatory agencies in order to increase risk-related information within financial statements. These regulations encompass SFAS 133, SFAS 157 and FRR 48 (US GAAP),

[66] Linsley and Shrives (2006) noted that even though enterprises had the opportunity to supply risk-related information on a voluntary basis few have done so. They suggested that the major problem with such disclosures was the reluctance of directors to release information about risks because it was deemed to be too commercially sensitive. In addition, the study detected reluctance among mangers to provide forward-looking risk information without safe harbour protections.

FRS 13 and FRS 29 (UK GAAP), GAS 5 (Germany GAAP) and IAS 32 and IFRS 7 (IFRS GAAP). Thus, several studies have examined the influence of these accounting standards on risk reporting practice. For example, a sizeable amount of North American research has investigated the mandatory risk disclosure requirements of FRR No. 48, SFAS 133 and SFAS 157 (Elmy et al., 1998; Rajgopal, 1999; Roulstone, 1999; Hodder et al., 2001; Jorion, 2002; Linsmeier et al., 2002; Lim and Tan, 2007; Perignon and Smith, 2010; Nelson and Rupar, 2011; Riedl and Serafeim, 2011; Bhat et al., 2011a; Bhat et al., 2012); under these regulations, firms had to disclose quantitative and qualitative information about market risk. The findings from these studies have indicated that risk regulations have had a positive impact on risk reporting; regulations have limited discretion by mandating risk disclosures by type and format. In addition, these studies have shown that there has been a great deal of variation in the quantity and clarity of risk disclosure provided in response to FRR No. 48, SFAS 133 and SFAS 157. The studies have concluded that risk disclosure has an impact on the capital market; a significant association was found between risk disclosure and market measures. As a result, risk disclosure was seen as useful for investors' decision-making as it enhanced their ability to assess a company's derivatives exposure.

Following the introduction of FRS 13 in the UK, which sought to enhance the provision of FI and associated risk information, Dunne et al. (2004) investigated the impact of FRS 13 on derivative reporting practices. The findings revealed that the standard contributed to improve risk information disclosure associated with FI usage such as interest rate and credit risk; specifically, the median of interest rate risk and liquidity risk climbed to 0.08 and 0.16 after the implementation of FRS 13 compared to medians of 0.04 and 0.12, respectively, beforehand. In Germany, the German Accounting Standard No.5: Risk Reporting (GAS5) required firms to report information about all types of risk exposures in their annual reports.

Kajuter (2001) investigated risk disclosure prior to the introduction of GAS5 and found that companies did not adopt a systematic approach to risk reporting and the risk information disclosed was fairly limited. By contrast, Woods and Reber (2003) found that risk disclosure increased significantly after GAS 5 became effective; they argued that the standard had had a positive impact on risk reporting and that the additional risk information supplied might have been useful for information users.

Prior to 2007, risk disclosure associated with FI under IFRS GAAP was embedded in IAS 32. This standard focused only on credit risk and interest rate risk (Young and Guenther, 2003). On this point, Schrand and Elliott (1998) stated that:

> "it is impossible to have a framework (standard) for risk selection that is specific about the types of risk that should be disclosed and at the same time, inclusive of all risk that firms face, but allowing managers discretion to choose which risks to report based on which they believe are significant is, in itself, informative" (p. 280).

Indeed, Bradbury (2003) argued that one of the underlying weaknesses of the IASB framework was that it almost ignored risk disclosure. Specifically, he stated that:

> "To understand fully asset transfers and a derecognition transaction, the financial statement description and risk disclosure are as essential as the recognition and measurement rules" (p.13).

However, this situation changed after the introduction of IFRS 7; risk disclosure associated with FI now occupies a major part of the disclosure requirements within IFRS 7. Indeed, Coetsee (2010a) argued that IFRS 7 placed considerable focus on risk disclosure (namely: credit risk, market risk, liquidity risk) and how management controls such risks. Importantly, under IFRS 7, firms are explicitly required, for the first time, to report all kinds of risk exposures associated with FI usage (Bischof, 2009). In order to fulfill this requirement, IFRS 7 identifies three types of risk arising from the use of FIs: (i) credit risk;

(ii) liquidity risk; and (iii) market risk. Therefore, the risk management information on FIs within the annual reports should include details on these three risk exposures using quantitative and qualitative information as appropriate. One of the earliest studies on this topic was undertaken by Bonetti (2011) who investigated the usefulness of the sensitivity analysis disclosure on currency risk mandated by IFRS 7 for Italian investors. The findings revealed that prior to IFRS 7's adoption, investors wrongly assessed firms' exposures to currency risk, while after IFRS 7 became effective the market reaction to exchange rate changes appeared to align more closely with the quantitative information provided by firms; sensitivity analysis of risk measures based on the requirement of IFRS 7 and daily share returns were positive and highly significant with an R-squared value of 0.14 and a p-value of 0.0001. This result is in line with the US literature which explored the usefulness of quantitative disclosures on market risk required by FFR No. 48 (Roulstone, 1999; Blankley et al., 2000).

3.4.2 Studies on FI Disclosure Conducted in Developing Countries

Empirical studies on FI disclosure in developing countries are very scarce (Hassan et al., 2006b). The main exception to this generalisation relates to a number of studies conducted in Malaysia (Norkhairul, 2003; Hassan et al., 2006b), the Czech Republic (Strouhal, 2009), Jordan (Rahahleh and Siem, 2009) and Brazil (Murcia and Santos, 2010). Specifically, Hafiz (2003) examined the voluntary disclosure of derivative information as set out in the Exposure Draft for MASB 24 *Financial Instruments: Disclosure and Presentations*, using a disclosure index. The study found that even with the Exposure Draft being published the level of voluntary derivative disclosure was low (22%). The authors suggested that this reflected a general absence of control mechanisms among Malaysian firms which use FIs and the non-mandatory requirements of MASB 24. This view was supported by Hope

(2003b) who argued that compliance with accounting standards was not always rigidly enforced in developing countries; hence, the level of disclosure varied. Following the enactment of MASB 24, Hassan et al (2006b) investigated FI disclosure in the financial statements of Malaysian listed firms; time series data (1999-2003) were examined in this investigation. Even though the study found that the quality of FI disclosure was low, evidence was provided that this low level of disclosure was increasing especially in the period immediately after the requirements of MASB 24 became mandatory. Specifically, they found that the overall level of FI disclosure increased from 25.67% in 1999 to 58.88% in 2003. In addition, while accounting policies and risk disclosure accounted for the highest level of FI information with 91% and 87%, respectively[67], hedge disclosure presented the lowest level of disclosure with 15%. They suggested that this might be due to the fact that the number of Malaysian firms actively hedging their anticipated transactions was low or non-existent. In general, the authors concluded that MASB 24 had influenced firms to provide more information about their usage of FIs; hence, the ability of information users in assessing a firm's FIs usage and associated risks might be enhanced.

In more recent investigations, Strouhal (2009) and Murcia and Santos (2010) analysed FI disclosure by Czech and Brazilain listed firms under their national GAAP and compared them to the requirements of IAS 32 and IAS 39. In general, both studies found a great deal of similarity between the national accounting principles and IFRS reporting requirements in accounting for FIs. In particular, they found that firms in both countries provided some FI disclosure; over 90% of sampled firms (in both countries) used fair value to measure their FIs. Consistent with Hassan et al. (2006b), both studies noted that the level of hedge

[67] The level of disclosure for accounting policies information increased from 84.30% (1999) to 98.55% (2003) and the level of risk information also increased from 73.97% (1999) to 97.93% (2003).

disclosure was very poor (18%). The authors suggested that adopting IFRSs in both countries might enhance existing accounting practices for FIs.

With respect to Jordan, Rahahleh and Siem (2009) investigated the impact of applying IAS 32 by Jordanian commercial banks from the perspective of auditors, preparers and investors. Specifically, the study examined two research questions: namely, (i) to what extent was the implementation of IAS 32 seen as an important change in reporting requirements for Jordanian commercial banks; and (ii) what was the impact of applying IAS 32 on the presentation and disclosure of derivative-related information in the financial statements. The study distributed a questionnaire survey (5-scale) to interested parties and obtained replies from 89 auditors, 84 preparers and 78 institutional investors with an overall response rate of 84%. An analysis of the findings of the first research question revealed a consensus among these groups about the importance of IAS 32 for Jordanian commercial banks with mean values of 4.2, 4.1 and 4.0 being documented (respectively) and a standard deviation of 0.087. The results suggested that the financial statement disclosures were more comparable and consistent as a result of applying IAS 32; the needs of financial statement users were better satisfied after IAS 32 was implemented. Regarding the second research question, the study also revealed that IAS 32 significantly enhanced the presentation of, and improved the disclosure of FI information in the financial statements. Specifically, respondents contended that IAS 32 contributed significantly to a better presentation and disclosure of FI with this question eliciting a mean and standard deviation of 4.0 and 0.075, respectively from a 5-Likert scale; the Chi-square (3.85) showed that the test significantly (p-value of 0.05) represented the opinions of the study sample. The authors suggested that the level of agreement among these stakeholder groupings indicated

that the items which had to be published according to the standard fulfilled the expectations of the financial statement users.

Risk disclosure associated with FI usage, as discussed in section 3.4.1.2, has been recognised as an independent stream of research in the financial reporting area (Roulstone, 1999). Risk disclosure studies in general and those associated with FI usage in particular conducted in developing countries are rather than limited (Othman and Ameer, 2009). The only exception to this claim relates to a couple of studies conducted in Malaysia (Amran et al., 2008; Othman and Ameer, 2009). Amran et al. (2008) investigated the risk disclosure for 100 Malaysian listed companies using content analysis. The findings revealed that, among the risk types researched, strategic risk was the most reported; 97% of the companies included a discussion on this particular risk type. This was followed by operation risk (96%), empowerment risk (82%), financial risk (64%) and information and technology risk (50%). In addition, the study found that firm size was positively related to more risk disclosure. Similarly, Othman and Ameer (2009) investigated market risk disclosure associated with FIs usage for 429 Malaysian listed firms based on the requirements of *FRS 132: Financial Instruments: Presentation and Disclosure*[68]. The study found that although a large number of companies (76%) showed a high level of compliance with the standard, the extent of compliance varied. Specifically, they found that (i) the majority of companies (90%) did not state whether they engaged in any speculative or trading activities using any hedging instrument; (ii) interest rate disclosure (35%) was more popular than credit risk (24%); and (iii) over 50% of the firms did not engage in hedging market risk and forward contracts were commonly used to minimise market risk. The

[68] FRS 132 is built upon the requirements of IAS 32.

authors suggested that the variation in terms of the nature and the extent of compliance among Malaysian firms reflected the critical need for specific risk regulations from regulatory bodies.

Disclosure about FIs in general and about risk associated with FIs in particular seem to be vital for those interested in evaluating the prospects of a firm (Dobler, 2008). Specifically, Jorgensen and Kirschenheiter (2003) found that strict mandatory disclosure of risk-related information increased the expected value of a firm. This suggests that FI disclosure may be value-relevant. The following section discusses the accounting literature relating to the value relevance of corporate disclosure in general and FI disclosure in particular.

3.5 The Value Relevance of Disclosures Concerning Financial Instruments

Corporate disclosure can enable outsiders to assess an entity's future economic performance in order to help them with their decision-making (Schrand and Elliott, 1998; Linsley and Shrives, 2006); hence, it enhances investors' welfare and investors trading activity (Beyer et al., 2010). In a world of information asymmetry, managers know more about the financial performance of their firms; they may have an incentive to withhold value relevant unfavourable information (Sengupta, 1998). According to this line of reasoning, the success at meeting (failure to meet) the outsiders' information needs may have a positive (negative) impact on firm value since it dissipates any information asymmetry which may be present; a firm's cost of equity capital should therefore fall as risk declines and stock market liquidity should rise (e.g. Botosan, 1997; Price, 1998). For instance, investors may invest in a firm which does not disclose a great deal of information; however, if they do so, they will need comparatively higher rates of return to compensate for the greater risk involved which will result in a higher cost of equity capital and a

decrease in stock prices, ultimately reducing firm value (Bushee and Noe, 2000). By contrast, increased disclosure may benefit some firms who have positive news to announce about their risk management strategies; these firms will have an incentive to disclose their news and attract more investors who demand a lower return (Price, 1998).

The value relevance of accounting information is considered to be one of the basic determinants of useful accounting information (Francis et al., 2004). It is measured as the ability of financial statement information to encapsulate or convey news that influences share prices (Francis and Schipper, 1999). In general, the value relevance of corporate disclosure has been examined in both developed countries (e.g. Diamond and Verrechia, 1991; Alford et al., 1993; Harris et al., 1994; Botosan, 1997; Collins et al., 1997; Francis and Schipper, 1999; Lev and Zarowin, 1999; Healy et al., 1999; Botosan and Plumlee, 2002; Hail, 2002; Bushee and Leuz, 2005, Poshakwale and Courtis, 2005) and developing countries (Hassan et al., 2009; Lopes et al., 2010; Al-Akra and Ali, 2012); the findings from these investigations have generated mixed results. Indeed, they indicate that cross-country differences along with corporate disclosure variations cause cross-country differences in the value relevance of accounting information.

With respect to the value relevance of FIs, Hassan and Mohd-Saleh (2010) emphasised the importance of the fair value of FI-related disclosures and overlooked other FI details that have been published. It is certainly the case that fair value disclosures concerning FI usage have been viewed as controversial; hence, a large proportion of the accounting literature has concentrated on examining its relevance for equity value (Al-Khadash and Abdullatif, 2009). Indeed, a series of value relevance studies about banks' fair value estimates of FIs exists (Barth, 1994; Barth et al., 1996; Eccher, 1996; Venkatachalam, 1996; Park et al.,

1999; Song et al., 2010). Barth (1994) is one of the pioneers in this area; she investigated the association between: (i) fair value disclosures about the gains/losses on a bank's investment securities and share prices; and (ii) the gains/losses for these securities on an historical basis and equity values using time-series data (1971-1990). The findings revealed that estimates of fair value disclosures about US bank's investment securities provided significant explanatory power beyond that provided by historical cost information. Indeed, she found that historical cost data about gains/losses on investments provided no significant incremental explanatory power once fair value information was available. The main reason for this difference was that fair value disclosures about investment securities were found to have less measurement error than their historical cost counterparts. In a similar study, Eccher et al. (1996) extended Barth's study by examining the value relevance of fair value information required under SFAS 107 for a sample of 296 banks over the years 1992 and 1993. They found that fair value[69] disclosures about investment securities (on and off-balance sheet) were value relevant; evidence was documented that the difference between fair and book value of FIs were associated with market-to-book ratio; the correlation was 0.26 and its P-value was 0.05. Indeed, the study found that financial information disclosed under SFAS 107 explained 63% of a share's price changes compared to an R-squared of only 43% beforehand.

In a subsequent study, Venkatachalam (1996) extended the work of Barth (1994) and Eccher (1996) by investigating the implications of fair value disclosures about FIs under

[69] Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction (IAS, 39, p. A875). Fair value accounting requires firms to record certain financial instruments at market prices (Laux and Leuz, 2010). On the other hand, historical cost represents the original cost incurred when acquiring an asset (Benston, 2011). In this regard, Both the IASB and FASB require companies to report the vast majority of FIs at fair value in their financial statements.

SFAS 119. The study found that fair value estimates of FIs helped explain some of the cross-sectional variation in share prices that was present; the R-squared and P-value for the equation were 0.85 and 0.001, respectively. He also discovered that fair value disclosures about derivatives had incremental explanatory power over and above the notional amounts for derivatives which had previously been included in financial statements. Barth et al. (1996) and Park et al. (1999) arrived at similar conclusions in their investigations.

In a comparative study, Wang et al. (2005) investigated the usefulness of notional amounts and fair values for FI information supplied by commercial banks under SFAS 119 and SFAS 133, respectively; they analysed time series data on disaggregated disclosures for a sample of 161 banks[70]. The main aim of the study was to discover whether the disaggregated disclosures[71] provided incremental information content beyond earnings and book value; the study examined the association between share prices and accounting information disclosed by firms. The findings indicated that the information content of FI was significant and provided incremental information beyond earnings and book value details. Specifically, the results revealed that the expanded disclosure provided under SFAS 133 was value relevant; derivative information under SFAS 133 (e.g. interest rate, foreign exchange, notional value, hedge accounting) was useful in explaining variations in a bank's equity values with an R-squared of 0.65. Using a sample of Australian firms, Hassan et al. (2006a), Li and Gao (2007) and Song et al. (2010) arrived at similar conclusions[72].

[70]Data relating to derivatives in this study were obtained from the Federal Reserve Bank. Other financial data (stock price, number of shares outstanding, book value, earnings, sales growth and total assets) were obtained from Standard & Poor's Research Insight.

[71] Disaggregated disclosure consists of notional values of derivatives by risk category (interest rate and foreign exchange) and by intended use (trading or non-trading)

[72] In a comprehensive study including all types of FI, Hassan et al. (2006a) investigated the value relevance of fair value disclosures of FIs within Australian extractive firms, based on *AASB 139: Financial Instruments: Recognition and Measurement.* The authors found that fair value information of FI was value relevant.

Unlike previous studies which focused on financial firms (Barth, 1994; Barth et al., 1996; Eccher, 1996; Venkatachalam, 1996; Park et al., 1999), evidence on this topic from non-financial firms is very rare although a small number of exceptions to this generalization exist. For example, Simko (1999) investigated the economic impact of fair value disclosures about FI under SFAS 107 using data for a sample of non-financial firms. The study discovered that FI information reported under SFAS 107 explained a significant proportion of the variation in a firm's market value, with an R-squared of 0.80. However, the findings revealed that fair value disclosures about FIs and related derivatives did not have any incremental explanatory power as compared to that supplied by historical cost information. In particular, differences between disclosed fair values and carrying amounts were zero for 66.5% of firm-year observations for FIs. Hassan and Mohd-Saleh (2010) suggested that this finding was possibly due to the similarity between fair values and book values in the case of non-financial firms.

Relatively few studies have examined the value relevance of IFRS GAAP. Bonetti (2011) is an exception to this generalisation; she investigated the usefulness of the sensitivity analysis disclosure on currency risk mandated by IFRS 7 for Italian investors. The findings revealed that prior to IFRS 7's adoption, investors made errors when assessing firms' exposures to currency risk. However, once IFRS 7 become effective the market reaction of a firm's share prices to exchange rate changes appeared to be linked with the quantitative information provided under the new standard; sensitivity analysis of risk measures based on the requirements of IFRS 7 and daily stock returns were positive and highly significant with an R-squared value of 0.14.

The value-relevance of FI disclosure also has been investigated in developing countries (Al-Khadash and Abdullatif, 2009; Ameer, 2009; Hassan and Mohd-Saleh, 2010). Al-Khadash and Abdullatif (2009) investigated the consequences of implementing fair values for FIs on a sample of 12 Jordanian listed commercial banks' income and earnings per share during the period from 2002 to 2006, based on IAS 39. In particular, the study made a comparison between banks' performance measures under fair value and historical cost. The findings revealed that fair value information for FIs had a significant positive impact on banks' income; banks' income significantly increased based on fair value measures for FIs compared to that under historical cost. For example, while some banks' income increased by 12%, other's income grew by 500%. In addition, the findings revealed that there had been an extremely positive influence on earnings per share when implementing the fair values; earnings per share increased for all sampled banks. For instance, while 30% of the banks recorded earnings per share of less than one in 2002, all of them had earnings per share of between one and two in 2005. The authors concluded that fair value accounting changed key financial measures as well as increased the value relevance of financial statement information[73].

Most recently, Hassan and Mohd-Saleh (2010) investigated the value relevance of FIs disclosure for 484 Malaysian listed firms, using three period of investigation[74] and based on MASB 24[75]. The authors constructed a disclosure index to measure the level of FIs disclosure and they used share prices for value relevance test. The study found that the

[73] With respect to the value relevance of corporate disclosure in Jordan, Al-Akra and Ali (2012) examined the usefulness of voluntary corporate disclosure made by 46 privatised Jordanian companies for the period between 1996 and 2004. The results indicated that voluntary disclosure provided by the sample firms was associated with firms' market value with a p-value of less than 5% and adjusted R-squared of 32.6%.

[74] Period one (prior to 2001): when there was no guideline from a standard, Period two (2001-2005): when disclosures were required by MASB 24 and Period three (2006-2009): prior to adopting new standard on the recognition and measurement of FI (FRS 139).

[75] MASB 24: Financial Instruments: Disclosure and Presentation, issued by the Malaysian Accounting Standards Board in 2001.

level of FIs disclosure in general and fair value information of FIs in particular were value relevant. Specifically, the findings revealed that (i) the association between market value and disclosure level was value relevant with R-squared of 0.26 and a p-value of 0.007; and (ii) net earnings and disclosure level were significantly correlated as well (R-squared= 0.6 and a p-value of 0.001). This implies that investors view the high level of FIs disclosure as important factor in investment decisions. Moreover, the findings indicated that this association was less positive in the period after MASB24 became mandatory; the authors argued this was not caused by bad news but mainly by the risk disclosure quality associated with FIs. Investigating the value relevance of risk disclosure for Malaysian listed firms, Ameer (2009) arrived at similar results[76].

3.6 Conclusion

This chapter has reviewed the extant empirical literature on corporate disclosure of FIs. The chapter started by discussing the usage of FIs and associated financial scandals. Then a discussion for FI disclosure in the context of accounting standards and empirical accounting research was provided. The value relevance of FI disclosure research was then discussed. Based on reviewing the extant literature, a numbers of gaps were found which motivated the current study. First, empirical research on corporate disclosure in general, and on FI disclosure in particular, is mainly focused on (i) developed countries and largely overlooks developing countries; and (ii) voluntary disclosure and neglects regulated disclosure. Thus, the current study attempts to fill this gap by investigating FI disclosure practices in the emerging capital market of Jordan. Second, prior research on FI disclosure emphasised either fair value disclosure of FI or derivative instruments. This study provides

[76] Ameer (2009) examined the value relevance of risk management practices (the notional amount of foreign-exchange and interest-rate derivatives) among Malaysian listed firms over the period 2003-2007. Using the Ohlson Model, the study found that: (i) there was a significant positive correlation between total earnings and the use of derivatives; and (ii) the disclosed notional amount of the derivatives were value relevant.

a comprehensive investigation of FI disclosure (derivative and non-derivative). Third, the extant early empirical studies on IFRS 7 are rather limited in scope and typically focus on the impact of IFRS 7 on disclosure levels. The present study expands this investigation by examining the impact of IFRS 7 on the extent of FI disclosure and explores the impact of this disclosure on the capital market.

Fourth, in contrast to previous studies on FI disclosure which have focused on the banking sector, this study examines a set of accounting standards for both financial and non-financial sectors. Finally, this is the first study that investigates and documents FI disclosure practices in Jordan[77]. In this regard, the Jordanian business environment and its economic developments in the last two decades (as discussed in Chapter 2) present an attractive and fruitful environment research.

[77] To the best of the researcher's knowledge, this is the first and most comprehensive study to have been conducted on FI disclosure in Jordan.

Chapter Four

Theoretical Framework: Decision-Usefulness Theory

4.1 Introduction

The Conceptual Framework (CF) represents a coherent system of interrelated objectives and fundamentals that prescribes the nature, function and limitations of financial reporting (FASB, 1976). Thus, the CF aims to identify the goals as well as the fundamentals underlying the concepts of financial reporting. Gore and Zimmerman (2007) agree with this view; they argued that a CF is like a constitution for financial reporting which provides (i) the unity and consistency required and, with that, the direction and means to help in making decisions; (ii) a structure to the process underpinning the creation of financial reporting standards; and (iii) an assurance that standards are based on fundamental principles. In this respect, Johnson (2004) has stated that "without a set of unified concepts, standard setters are like a ship in a storm without an anchor" (p. 1). In addition to the IASB, other accounting standard-setters from different parts of the world have embarked on developing CFs; these are all primarily based on the fundamental objective that financial reporting should provide information that is useful to investors and creditors in making decisions (Chalmers, 2001).

Consistent with the CF of the IASB, the current study adopts a decision usefulness (DU) approach as its underlying theoretical framework. The remainder of this chapter expands on this theoretical framework and is structured as follows: Section 4.2 outlines the importance and the role of theory in accounting research. This is followed by Section 4.3 which discusses the development of the DU approach. Section 4.4 discusses the adoption of the DU approach by accounting standard-setters. Section 4.5 examines the extant empirical research that has employed a DU perspective. The limitations of the DU approach are highlighted in Section 4.6. A theoretical framework for the current study is discussed in Section 4.7. Finally, a conclusion is provided in Section 4.8.

4.2 The Role of Theory in Accounting Research

The importance of theory to a researcher in the social sciences lies in providing a rationale for the work that is being conducted as well as a framework within which social phenomena can be understood and research findings interpreted (Mathews and Perera, 1996; Bryman, 2008a). Thus, much academic discussion is devoted to finding out what theory means (Chambers, 1972; Alvesson and Deetz, 2000). For example, Bryman (2008a, p. 4) argued that the term "theory" is employed in several ways when conducting research and its most common meaning is as "an explanation of observed regularities". In addition, Hendriksen (1970, p.1) defines a theory as "a coherent set of hypothetical, conceptual and pragmatic principles forming the general framework of reference for a field of inquiry". In fact, Deegan and Unerman (2006, p. 2) suggest that what emerges from the many definitions of this term is that "a theory should be based on logical (systematic and coherent) reasoning".

Perks (1993) underscores the relationship between theory and research. Specifically, May (1993) argued that for social research to understand and explain the social world, research needs theory and theory needs research. This statement reflects the importance of theory in conducting research. With respect to accounting research, Belkaoui (1987) pointed out that the role of theory in accounting research has four dimensions: (i) description, which comprises the use of constructs or concepts and their relations in order to provide a better explanation of certain phenomena; (ii) delimitation, which consists of the selection of a specific set of events to be illustrated; (iii) generation, which means the ability to generate an examinable hypothesis or ideas from which hypotheses can be drawn; and (iv) integration, which means the ability to present a coherent and consistent integration of the different concepts and relations of a theory.

Therefore, it could be argued that theory is a fundamental component of accounting research; it provides a CF which acts as a foundation for designing, understanding and interpreting the research problem (Kribat, 2009). In terms of accounting research, Ijiri (1983) argued that a CF can be decision-based or accountability-based and the choice critically influences the resulting framework[78]. More recently, Williams (1987) and Collison et al. (1993) argued that accountability and decision usefulness can be used as lenses in accounting research but they do not necessarily reach the same understanding of an accounting issue or lead to equally convincing justifications[79].

4.3 An Overview of the Decision Usefulness Approach

Staubus (2000) argued that for several decades, the accounting literature (both academic and professional) ignored the main objective of providing useful information for making decisions. The notion that accounting information should aid users in making decisions can be traced back to the 1950s (Chambers, 1955; Sterling, 1972; Staubus, 1976). For example, Chambers (1955) underscored the importance of financial statements as the foundation for decision-making and stressed that information provided in annual reports should be relevant for users' decisions. According to Williams (1987), decision making is considered the primary principle of financial statements[80]. Indeed, as far back as 1966, the American

[78] Ijiri (1983) stated that "a framework built on the accountability relation emphasises on the relation between the accountor, the supplier of the accounting information and the accountee, the user of accounting information. On the other hand, the framework that is decision-based is focused on the decision maker, namely, the user of accounting information" (p. 75).

[79] Collison et al. (1993) argued that any deductive analysis of financial reporting ideally starts with specification of the purpose that financial statements serve; such specification is problematic because it appears to have two major alternatives which could generate different analyses and conclusions. These are decision usefulness and accountability.

[80] Williams (1987) stated that "Decision making is the central principle for organising and directing accounting research and is also the public rationale for accounting standard setting. Pronouncements by both practitioner and academic groups highlight the importance of decision making to accounting; as decision making has seen so apprehended it is become for accountants an emphasis on decision making" (p. 169).

Accounting Association (AAA) issued the *Statement of Accounting Theory and Theory Acceptance* (SATATA) where they stated that "Financial reports are intended to provide information that is useful in making business and economic decisions" (as cited in Schroeder et al., 2005, p. 42). Moreover, in a discussion about the nature of information to be provided and the type of decision-making to be taken, Staubus (1976, p. 276) stated that:

> "The objective of accounting is to provide financial information regarding an enterprise for use in making decisions. The objective of accounting to investors is to provide financial information regarding an enterprise for use in making investment decisions [investors have always included owners and creditors].

Staubus's (1976) statement was supported by Ijiri (1983) who adopted a far broader perspective when explaining DU by stating that:

> "In a decision based framework, the objective of accounting is to provide information useful for economic decisions. It does not matter what the information is about. More information is always preferred to less as long as it is cost effective. Subjective information is welcome as long as it is useful to the decision makers" (p. 75)

The movement towards DU during the 1960s and 1970s is considered to be a fundamental change in attitude towards the purpose of financial statements (Storey and Storey, 1998). Thus, the appearance of DU in the accounting literature increased notably over the latter half of the 20th century. Indeed, Staubus (2000) argued that by 1999 the presence and the impact of DU were discernible. He pointed out that this influence was particularly evident in four areas: (i) standard setting; (ii) practice; (iii) teaching; and (iv) research.

DU is seen as the provision of sufficient information in order to assist users in making predictions about future performance. For instance, Glautier and Underdown (2001) noted that DU included information disclosure which leads to an improvement in transparency in

terms of information quantity and quality, thereby improving the efficiency of capital markets. Staubus (2000) built on this notion when he stated that:

> "Investors commit resources to an enterprise with the expectation of receiving a return, usually in cash. Investment decisions are cash flow-oriented decisions. They are facilitated by information useful in producing the times and amounts of return from the enterprise to the investor. Accounting information can provide evidence of the times, amounts and uncertainty of future enterprise cash flows" (p. 2)

The accounting literature suggests that assurance of financial reporting information is critical to economic decision-making; this overarching criterion should be taken into consideration when deciding about the usefulness of information (American Accounting Association, 1966; Libby, 1975; Staubus, 1976; Bovee et al., 2009). Accounting research identifies a number of qualitative characteristics considered necessary for useful accounting information, namely: relevance, reliability, comparability, understandability, timeliness and objectivity (McDonald, 1967; Snavely, 1967; Sterling, 1972; Staubus, 1976; Gray et al., 1996; Sharma and Iselin, 2003). What is more, Staubus (1976) argued that these characteristics should be understood in order to be acceptable. Specifically, he stated that:

> "A characteristic may be partially met, or met to a degree. Attribute relevance, for example is not a go, no-go criterion; there are degrees of relevance. Rarely will a criterion be met perfectly but complete failure on a criterion is also uncommon. As a consequence, tradeoffs must be made, as when a bit of relevance may be sacrificed for the stake of greater reliability, or lower cost of production"(p. 277).

In general, the DU approach is deemed to be the most influential theory in current accounting practice by a sizeable number of academicians. In this regard, Puxty and Laughlin (1983) have stated that:

> "All extant accounting theory is based upon the usefulness of information to decision-makers and this basis has become so fundamentally ingrained that it is no longer considered problematic" (p.1)

Consequently, this theory is generally accepted and widely used in financial reporting research[81]. In this regard, Staubus (2000) argued that:

> "The decision usefulness theory of accounting is now generally accepted among those few people interested in accounting theory. There is no recognisable alternative; it has been the most important development in accounting thought in the second half of the twentieth century" (p. i).

In addition to being studied by accounting theorists and scholars, DU has also been widely employed by accounting standard setters all over the world (i.e., FASB, ASB and IASB).

4.4 Adoption of the Decision Usefulness Approach by Accounting Standard-Setters

Although the notion of DU adoption emerged in the accounting literature as early as the 1950s, standard-setters only started to reflect this approach in their pronouncements during the late 1960s. FASB was the first major accounting body to employ DU in their CF for accounting standards (Deegan and Unerman, 2006). This encouraged other accounting agencies to recognise the approach as a suitable basis for financial reporting including the ASB and the IASB[82].

4.4.1 Adoption of the Decision Usefulness Approach by the FASB

In the US, attempts to establish a CF for financial reporting were led by the American Institute of Certified Public Accountants (AICPA) in the early 1960s (Moontiz, 1961;

[81] For example, Libby, 1975; Lee and Tweedie, 1979; Casey, 1980; Zimmer, 1980; Barena and Lakonishok, 1980; Suwaidan et al., 2007; Kribat, 2009; Finningham, 2010.

[82] Other accounting bodies in other countries have also adopted this approach in their accounting pronouncements, such as Canada, Australia and New Zealand.

Sprouse and Moontiz, 1962; Grady, 1965)[83]. The work of Grady (1965) led the Accounting Principles Board (APB) to introduce the *Statement of Financial Accounting Concept (SFAC) No. 4: Basic Concepts and Accounting Principles Underlying the Financial Statements of Business Enterprises* in 1970. Deegan and Unerman (2006) argued that although SFAC 4 did not generate a great deal of controversy and was accepted by the AICPA, it was criticised for: (i) the apparent lack of any real CF; and (ii) the absence of agreement on major issues, namely: the role and objectives of financial reporting, and the recognition and measurement rules for accounting items.

Accordingly, the AICPA established the Trueblood Committee in 1971 to address these criticisms. By 1973, the Committee issued the Trueblood Report which introduced 12 objectives for accounting information and outlined seven qualitative characteristics that financial information should possess[84]. This report represented the first step on the road to recognising DU (as opposed to stewardship) as a key objective of financial information. Objective No. 1 and objective No. 2 of this report specifically identified the goals of financial statements and the needs of financial information users by stating that the role of financial statements was:

> "…to provide information useful for making economic decisions … Financial statements are to primarily serve those users who have limited authority, ability or resources to obtain information and who rely on financial statements as the principal source of information about an organisation's activities" (p. 16.)

[83] These studies were commissioned by the Accounting Research Division of the AICPA. With respect to the findings of these studies, the work of Moontiz (1961a) and Sprouse and Moontiz (1962) prescribed that accounting practice should move towards a system based on current values rather than historical cost. The AICPA (1962) considered that this work was too radically different from GAAP. In contrast, Grady's (1965) work was basically a description of existing practice and was therefore considered quite uncontroversial.

[84] These qualitative characteristics are: relevance, form and substance, reliability, freedom from bias, comparability, consistency and understandability (Trueblood Report, 1973).

Since its establishment in 1974, FASB[85] embarked on the process of developing a CF which would introduce principles-based standards that would permit rational choices to be automatically made among alternative methods of financial reporting (Schroeder et al., 2005). Consequently, FASB's Conceptual Framework Project resulted in the introduction of seven statements[86]. Schroeder et al. (2005) argued that SFAC No. 1 (1978) and SFAC No. 2 (1980) can be described as setting the goals to guide practice; they illustrated how these goals are useful in making qualitative decisions about what preparers should report. In particular, *SFAC No.1: Objectives of Financial Reporting by Business Enterprises* defines the primary objective of financial reporting as "Usefulness" and considers "Usefulness" as the only means of assessing the worth of financial information to users by stating that:

> "The objective of financial reporting is to provide information that is useful in making economic decisions, irrespective of what those decisions are, or should be… Financial reporting should provide information that is useful to present and potential investors and creditors in making investment and credit decisions" (Para 32 - 34).

Importantly, SFAC No. 1 contends that FASB will use these broad objectives as guidelines when assessing the usefulness of new and existing GAAP for users who are making investment and credit decisions (Schroeder et al., 2005). In turn, such guidelines will help facilitate the efficient use of scarce resources and the smooth operation of capital markets (O'Regan, 2006). In terms of information quality, *SFAC No. 2: Qualitative Characteristics of Accounting Information* describes how financial statements can be useful. Schroeder et

[85] In 1974 the Accounting Principles Board (APB) was replaced by the Financial Accounting Standards Board (FASB).

[86]These statements are: SFAC 1: Objectives of Financial Reporting by Business Enterprises, SFAC 2: Qualitative characteristics of Accounting Information; SFAC 3: Elements of Financial Statements of Business Enterprises (replace by SFAC 6); SFAC 4: Objectives of Financial Reporting by Non-business Organizations; SFAC 5: Recognition and Measurement in Financial statements of Business Enterprises; SFAC 7: Using Cash Flow Information and Present Value in Accounting Measurements (Schroeder et al., 2005).

al. (2005) argue that SFAC No. 2 bridges the gap between SFAC No.1 and subsequent statements that describe the elements of financial reporting providing guidelines for recognition, measurement, and disclosure issues. It addressed the question of what characteristics make financial information useful. Figure 4.1 shows the hierarchy among the qualitative characteristics of accounting information which were introduced by SFAC No. 2.

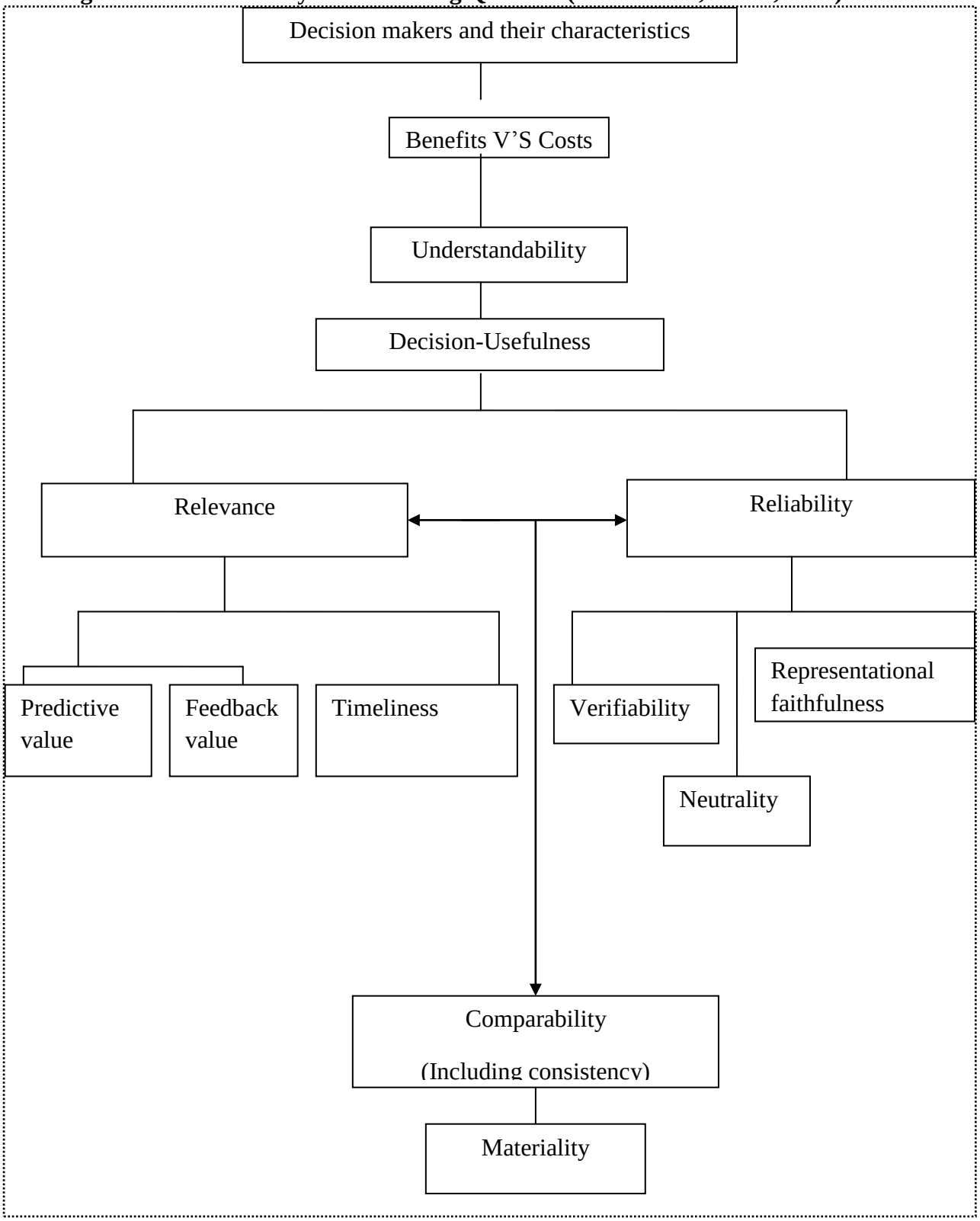
According to SFAC No. 2, the characteristics that make information a desirable commodity are viewed as a hierarchy of qualities, with understandability and usefulness for decision making considered the most important. Hence, the qualities which distinguish better (or more useful) information from inferior (less useful) information are primarily the qualities of relevance and reliability (SFAC No. 2, 1980; Gibson, 1992; Schroeder et al., 2005). According to this, Gibson (1992) pointed out that relevance and reliability are the two primary qualities that make accounting information useful for decision making. Relevant financial information can help users to form predictions about the outcomes of past, present and/or future events (SFAC No. 2, 1980). Specifically, SFAC No. 2 stated that relevant information should have predictive and feedback value; it should be timely; reliable information should be verifiable, subject to representational faithfulness and neutral in its orientation (SFAC No. 2, 1980).

The comparability characteristic rests on the notion that the usefulness of information about a particular enterprise increases greatly if it can be compared with similar information from other enterprises and with similar information about the same enterprise for another period or point in time (Gibson, 1992). Furthermore, financial information should have benefits

that exceed its cost for it to be considered useful. Finally, all qualities of information shown in Figure 4.1 are subject to a materiality threshold (SFAC No. 2, 1980).

Miller (1990) suggests that FASB's Conceptual Framework Project initially provided much needed reform in accounting; this clearly appeared in SFAC No. 1 which explicitly promotes users' needs for financial information to the forefront of consideration. The ASB in the UK has followed FASB's approach by concentrating on the needs of the user when developing its own CF.

Figure 4.1: A Hierarchy of Accounting Qualities (SFAC No. 2, FASB, 1980)



Note: This chart presents the hierarchy of qualitative characteristics of accounting Information which was issued by the FASB (SFAS 2, 1980, p. 20).

4.4.2 Adoption of the Decision Usefulness Approach by the ASB

In the UK, a movement towards developing guidance on the objectives of financial reporting started with the release of the Corporate Report produced by the Accounting Standards Steering Committee of the Institute of Chartered Accountants in England and Wales in 1976 (Deegan and Unerman, 2006). This report addressed three main issues: (i) the types of organisation which should publish regular financial information; (ii) the identification of the principal users of such reports and their particular requirements; and (iii) the form of report that best satisfied these requirements (the Corporate Report, 1976). According to this document, the primary objective of corporate reporting is to communicate economic measurements of, and information about, the resources and performance of the reporting entity (O'Regan, 2006). The Report stated that to achieve this objective, financial reporting should conform to various parameters which echo the findings of the Trueblood Committee. These included relevance, reliability, understandability, comparability, timeliness and objectivity[87].

In 1999, the ASB introduced the Statement of Principles[88] (SoP) for financial reporting; this statement included eight chapters[89]. O'Regan (2006) argued that the Statement of Principles clearly reflected the earlier influence of FASB's Conceptual Framework Project. In particular, *Chapter 1: the Objective of Financial Statements* highlighted the focus on the DU approach by stating that:

[87] The conceptual framework of the ASB drew heavily from the IASC's conceptual framework.

[88] The UK Statement of Principles stressed both stewardship and economic decision as primary objective of financial reporting (paras, 1.4-1.6) consistently, the 2010 conceptual framework emphasises both decision usefulness and stewardship as the primary objective of financial reporting.

[89] These chapters are: (i) the objective of financial statements; (ii) the reporting entity; (iii) the qualitative characteristics of financial information; (iv) the element of financial statements; (v) recognition in financial statements; (vi) measurement in financial statements; (vii) presentation of financial statements; and (viii) accounting for interests in other entities (O'Regan , 2006).

> "The objectives of financial statements are to provide information about the reporting entity's financial performance and financial position that is useful to a wide range of users for assessing the stewardship of management and for making economic decisions" (SoP, p.11)

In particular, Chapter 1 of the SoP identified the user groups of financial information such as: investors, lenders, creditors, employees, customers, government and the public (SoP, 1999, p. 18). It contended that information meeting the needs of owners and lenders would usually satisfy the requirements of all users. Hence, it was the investor perspective that predominated (O'Regan, 2006). Moreover, Chapter 1 of this document stressed the importance of cash flow information as a crucial element in enhancing the decision-making process. Finningham (2010) argued that the objective of the SoP was broadly in line with FASB's Conceptual Framework Project in terms of : (i) emphasising the importance of predicting future cash flows as the objective of financial reporting; and (ii) selecting relevance and reliability as the key qualitative characteristics of accounting information in addition to other similar qualities.

4.4.3 Adoption of the Decision Usefulness Approach by the IASB

In addition to FASB and the ASB, the DU approach has also been endorsed by the IASC as an underlying assumption for enhancing the quality of accounting information and aiding users when making decisions in an international context (Gore and Zimmerman, 2007). Since its establishment in 1973, the IASC has embarked on the development of its own CF. This ambition was quite complicated given that the development of an international CF necessitated that the interests of a variety of countries should be balanced (O'Regan, 2006)[90]. O'Regan (2006) noted that the interests of developed and developing countries were often diametrically opposed. Remarkably, however, the IASC issued its CF in 1989

[90] O'Regan (2006) argued that Anglo-American regulators favour frameworks that focus on the interest of investors, while continental European countries are less comfortable with this bias.

entitled *"Framework for the Preparation and Presentation of Financial Statements"*[91]*;* this drew heavily on FASB's framework when it dealt with a variety of issues, namely: (i) the objectives of financial statements; (ii) the assumptions underlying these statements; (iii) the qualitative characteristics of financial information; (iv) the elements of financial statements; (v) recognition and measurement issues; and (vi) concepts of capital and capital maintenance (IASC, 1989). The IASC's CF stated that the objective of financial statements was to:

> "...Provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions" (IASC, 1989, p. 5).

In addition, the statement identified various user groups who might use financial statements[92] with investors signed out as being the most important category. It stated that:

> "Although the information needs of these users cannot be met solely by the presentation of financial statements, there are needs that are common to all users … since investors are the providers of risk capital to the enterprise, the preparation of financial statements that meet their needs will also satisfy most of the needs of other users" (IASC, 1989, p. 5).

The IASC's CF framework also identified qualitative characteristics that information should posses in order for it to be considered useful. These included understandability, relevance, reliability and comparability. Such characteristics were very similar to those in FASB's CF. Thus, Bonham et al. (2004) and Finningham (2010) argued that the CF of the IASC was a synopsis of FASB's CF. Not surprisingly, therefore, the IASC's CF was criticised as being Anglo-American-focused with strong bias in favour of the interests of

[91] This framework was not issued as an accounting standard and therefore the requirement of IASs superseded it (IASC, 1989).
[92] Users are investors, employees, lenders, suppliers, other trade creditors, customers, governments and their agencies, and the general public.

private investors (O'Regan, 2006). This perceived bias may have partly explained the reluctance of some EU countries to fully embrace IAS/IFRS[93].

In 2001, the IASB was established with a full-time professional board and succeeded the IASC[94]. It inherited a remarkable legacy from its predecessor body which helped it to expand and encourage countries to use its pronouncements[95]. This expansion provides some evidence of an underlying demand for IAS/IFRS in global capital markets. The IASB adopted the IASC's CF which basically concentrated on the DU approach.

In order to revise their CF and establish a more comprehensive and acceptable set of accounting principles, the IASB and FASB collaborated with the aim of creating a unified CF. The joint CF project between the IASB and FASB was initiated in 2002 as a direct result of the Norwalk Agreement (Bullen and Crook, 2005) under which both standard-setting bodies agreed to work jointly on future accounting standards and to align existing standards where differences were present[96]. The IASB and FASB aimed to produce a common CF to: (i) promote the convergence of US GAAP and IFRS and ultimately lead to a single set of high quality global accounting standards (Gore and Zimmerman, 2007); and (ii) remove existing differences between the two frameworks, fill in any gaps, and make

[93] Traditional accounting systems in several EU countries, such as France and Germany, have been driven by emphasis on financial reporting conformity with tax regulations, conservatism, and broad-stakeholder orientation; snice the domestic standards in these countries deviate from IFRS, it is expected that adoption of IFRS will be relatively more beneficial to investors in these countries and have a significant impact on financial results (Radebaugh and Gornik-Tomaszewski, 2006).

[94] The IASB was created to be an independent world standard-setter, reflecting the new demands established by the IOSCO endorsement of the IASs and the European commission's decision to mandate the use of those standards in the group of accounts of companies listed within the EU (Whittington, 2008b).

[95] The European Union decided to apply IAS/IFRS for European listed firms, Australia has adopted the standards for all companies, as a legal requirement, and many other countries have moved towards adopting the IASB's standards including many that plan complete convergence of domestic standards with IFRS for listed companies. These include significant economies such as Brazil, Canada, China and India. More than 100 countries now recognise international standards for some purpose. Furthermore, the most notable achievement has been the recent decision by the United States Securities and Exchange Commission (SEC) to accept IFRS accounts for foreign registrants on US capital markets without reconciliation to US GAAP. Furthermore, the SEC is consulting its constituency on the possibility of allowing domestic US listed entities to use IFRS rather than US GAAP (Radebaugh and Gornik-Tomaszewski, 2006).

[96] Both boards intend to move towards principle-based standards, so having a common conceptual framework that is up to date, internally consistent, and complete would help the boards achieve that goal (Gore and Zimmerman, 2007).

improvements where necessary (Whittington, 2008a). In this respect, Whittington (2008a) acknowledged that the task was less onerous than anticipated because the IASB's CF drew heavily on the prior work of the FASB with its strong DU orientation and the decision to place less emphasis on measurement matters.

The culmination of the cooperation between the FASB and the IASB resulted in the introduction of a joint discussion paper in 2006. Whittington (2008a) argued that "No issue could be more important for the international harmonisation of financial reporting than starting from a commonly accepted objective" (p. 498). The project reaffirmed the existing objective of financial reporting and reiterated that investors and creditors were the main recipients of financial information because they were assumed to make resource allocation decisions on the basis of the information, specifically, it stated that:

> "…The objective of financial reporting is to provide decision useful information to current and prospective investors and creditors in making investment, credit and similar resources allocation decisions … These needs would be met by providing information to assess the amounts, timing and uncertainty of the entity's future cash flows and outflows" (IASB, 2006, p. 12).

The project, further, identified the qualitative characteristics for financial information to be considered decision-useful, namely: relevance, faithfulness representation, comparability (including consistency), understandability, materiality (IASB, 2006a, p. 16). Gore and Zimmerman (2007) argued that this project made standards-setting more efficient by providing a common set of terms and premises for analysing accounting issues. In addition, Whittington (2008b) argued that although they were broadly similar, there were major changes in the form and the language used to describe these characteristics; he stated that:

> "The change in form is the sequential approach to applying the qualitative characteristics, replacing the previous simultaneous approach in which explicit trade-offs was made. The change in the language is the replacement of reliability by faithful representation" (p. 146).

Following this project, there were considerable debate among academics and practitioners. For example, Whittington (2008b) argued that the notion of stewardship was a central issue in this debate. Specifically, concern was expressed about the fact that the project did not consider stewardship as a fundamental approach of financial reporting; instead, it was considered as a part of the DU objective. In particular, the project stated that:

> "The objective of financial reporting, [to provide decision useful information to current and prospective investors and creditors in making investment, credit and similar resources allocation decisions] encompasses providing information useful in assessing management's stewardship" (IASB, 2006a, p. 28).

Gore and Zimmerman (2007) stated that over 85 per cent of the comment letters received by the IASB in response to the 2006 Discussion Paper disagreed with this "view of stewardship" (p. 32). The respondents argued that it should be retained as an independent objective of financial reporting since only a small fraction of firms are publicly traded and the shareholders/investors orientation of the 2006 Discussion Paper may focus the CF towards the needs of capital markets rather than to the requirements of stakeholders in privately held business firms[97]. This perspective was supported by two members of the IASB; they disagreed with the 2006 Discussion Paper in terms of its view on DU and stewardship to such an extent that they issued an alternative written opinion; in this opinion, they stated that:

> "…Stewardship and decision usefulness for investors are parallel objectives which do not necessarily conflict, but which have different emphasis. They should therefore be defined as separate objectives"(Alternative View, para.1.4).

[97] The IASB received over 175 comment letters on the 2006 Discussion Paper (Gore and Zimmerman, 2007).

This perspective is in keeping with the earlier view of Gjesdal (1981) who argued that the categorisation of information systems for decision purposes and stewardship purposes are not perfectly aligned. Indeed, Christensen (2010) highlighted that there is no universally optimal information system that is independent from the specifics of the reporting situation; he stated that:

> "... it follows from the institutional setting that it is impossible to have two different financial reporting systems – one for decision purposes and one for stewardship purposes. It is impossible for the users to commit to not using the decision-relevant information for stewardship purposes as the use of the information system is decoupled from the production" (p. 295).

Another criticism of this project related to the qualitative characteristics of financial reports involving the trade-off between relevance and reliability and the exclusion of traditional accounting concepts such as the idea of going-concern (Gore and Zimmerman, 2007). However, Christensen (2010) suggested that "it is impossible to maximise all qualitative characteristics simultaneously and consequently there is a demand for trade-offs" (p. 288). Furthermore, Christensen (2010) questioned whether these qualities could be applied to a wide range of financial information.

The assertion that the needs of all users will be satisfied by meeting the requirements of major user groups [investors and creditors] has also been questioned (Whittington, 2008a). In addition, Lennard (2007) argued that the joint project did not deal with financial reporting by business entities in the not-for-profit sector. Specifically, the Discussion Paper's accrual-orientation did not fit with a public sector emphasis on cash flows. Following the feedback received on the 2006 Discussion Paper, the IASB and FASB issued the 2008 Exposure Draft (ED) about the objectives and qualitative characteristics of

financial reporting (IASB, 2008). The 2008 ED refined the objective of financial reporting by stating that:

> "The objective of financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions in their capacity as capital providers. Information that is decision-useful to capital providers may also be useful to other users of financial reporting who are not capital providers" (IASB, 2008, p. 12)

This broad objective of financial reporting came after the criticisms levelled at the 2006 Discussion Paper which emphasised relatively narrow resource allocation decisions. Whittington (2008a) suggested that the 2008 ED expanded the types of decisions considered to include those decisions made by providers of capital such as resource allocation decisions and decisions about protecting and enhancing their investment. Christensen (2010) argued that, in the 2008 ED, the main DU objective was expanded to encompass the protection and enhancement of investment by providers of debt capital. Indeed, Finningham (2010) concluded that although the 2008 ED concentrated on DU, the proposed goal of financial reporting in the document explicitly discussed how users use financial statements for stewardship purposes.

In addition, the 2008 ED restructured the qualitative characteristics of the financial information as follows: (i) it identified fundamental qualities which financial information should possess to be considered useful, namely: relevance and faithful representation; (ii) it also proposed enhancing qualities which are complementary to fundamental characteristics, including comparability, verifiability, timeliness and understandability; and (iii) it highlighted pervasive constraints on financial reporting which include materiality and cost (IASB, 2008, p. 35-43). The two standard setting boards asserted that the fundamental characteristics are crucial for information to be considered useful, while the enhancing

characteristics further expand the usefulness of information provided. Bovee et al. (2009) investigated whether these characteristics (fundamental and enhancing qualities) adequately predicted the perceived usefulness of financial information suggested by the 2008 ED[98]. Their findings revealed that both fundamental and enhancing characteristics significantly predicted user perceptions of key qualities (usefulness, relevance, and faithful representation). The study highlighted that the associations between these characteristics were significant and that the magnitude of the relationships were consistent with the theoretical approach which classified financial reporting information characteristics as fundamental to, or capable of enhancing, DU[99]. Bovee et al's (2009) findings lent empirical support to the validity of the 2008 ED as an accurate description of "useful" financial reporting information within an international setting.

However, Finningham (2010) argued that several concerns have been raised regarding the content of the 2008 ED, including: (i) the failure of the boards to adequately distinguish between financial statements and financial reporting; (ii) the absence of any justifications for the replacement of reliability with faithful representation; and (iii) the overemphasis on the provision of information to enable users to forecast future cash flows. Although qualitative characteristics are the most abstract element of the CF (Gore and Zimmerman, 2007), Finningham (2010) suggested that these changes may result in significant variations in the future of financial reporting practices. Thus, he proposed that accountants should pay more attention to what is and what is not included in these qualities.

[98] Using a survey based on the 2008 ED issued by the IASB and FASB, Bovee et al. (2009) surveyed "self-identified investors" from Zoomerang database and asked them to consider and rate the financial information they generally used (i.e. quarterly or annual reports, balance sheets, income statements, statements of cash flow, related notes, and other explanatory material).

[99] However, some paths between characteristics were found insignificant. For instance, the ED describes "verifiability" as enhancing usefulness, completeness as being important to faithful representative, and faithful representative as required for usefulness. However, none of the paths were significant or predictive. Nevertheless, the authors argued that end users of financial information may not be able to assess these characteristics, or may use proxy constructs for them not captured by the model.

In September 2010, the IASB issued its "Conceptual Framework for Financial Reporting (IASB, 2010). According to this framework, the general purpose of financial reporting is to provide information for "present and potential investors, lenders and other creditors" (para OB2)[100] [101]. Like the previous frameworks, the 2010 CF focused on the decision usefulness of financial information:

> "Who [investors, lenders and other creditors] use that information to make decisions about buying, selling or holding equity or debt instruments and providing or settling loans or other forms of credit" (para OB2).

Again, the IASB focused on investors and creditors as the primary users of financial information. However, in the 2010 CF the IASB explicitly recognised a new group of users called lenders; the IASB considered this group as a primary category who use financial statements for "providing or settling loans".

In Jordan, the Jordanian High Council of the Accounting Profession and JACPA adopted the IASB's framework and its standards in 1997; one of the JACPA's main objectives was to keep up to date with the IASB's frameworks as well as to make sure that Jordanian companies complied with IASs. In particular, JACPA (2010) stated that:

> "…ensuring compliance with IASB's conceptual framework requirements and International Accounting Standards… which would contribute to the protection of the national economy of Jordan, and the upgrading of

[100] The 2010 conceptual framework states that: (i) the primary users comprise existing and potential investors, lenders and other creditors who are (a) providing, or considering providing, resources to the entity; and (b) do not have the power to compel the entity to provide information directly to them and must rely on general purpose financial reports (IASB, 2010, OB2). The qualitative characteristics of accounting information as follows: (i) the fundamental qualitative characteristics which comprise relevance and faithful representation; (ii) the enhancing qualitative characteristics which consist of comparability, timeliness, verifiability and understandability; and (iii) a pervasive characteristic which includes the cost constraint (IASB, 2010, QC4).

[101] The 2010 conceptual framework paid more attention to the issue of stewardship as a primary objective of financial reporting in addition to the decision usefulness focus (IASB, 2010).

> accounting research and professional development of Certified Public Accountants" (p. 3).

Moreover, the Securities Law of 1997 issued by the JSC also required Jordanian listed companies to comply with IASs and other IASB requirements (see Chapter 2). In other words, the Jordanian accounting profession and regulators have adopted the IASB's conceptual framework and its standards when preparing Jordanian laws about financial reporting.

In summary, the main standard setting bodies have always adopted a decision usefulness approach in their conceptual frameworks (FASB, 1978; IASC, 1989; IASB, 2006a; IASB, 2010). Thus, the adoption of decision usefulness theory in the current thesis seems justifiable since it will facilitate an evaluation of the impact of IFRS 7 on Jordanian listed companies against the aims of those who introduced the standard. In addition, it will enable the researcher to investigate the value relevance of FI reporting standards based on the characteristics of useful information proposed by the standard-setters. Since the standard is part of the convergence project between the IASB and FASB and since these bodies adopted decision usefulness theory in their 2006 joint CF, it seems appropriate to evaluate the standard against the criterion which its adopters employ[102]. Decision usefulness theory

[102] In fact, differences in accounting standards in general, and in FI-related standards in particular, have led FASB and the IASB to work jointly in order to harmonize their requirements; they began this convergence process in 2000. Since 2006, the boards have been engaged in a joint project called *Accounting for Financial Instruments* (IASB, 2008). The objective of this joint project is to significantly improve the decision-usefulness of FI disclosures for users of financial statements (Ighian, 2012). This joint work resulted in the introduction of a discussion paper by both standard-setters in 2008 called *Reducing the Complexity in Reporting Financial Instruments*. This paper concentrates on the measurement of FI and hedge accounting as well as on identifying possible approaches to reducing the complexity inherent in accounting for FI. Hence, IFRS 7 was part of this convergence project.

assumes that the main objective of financial reporting is to provide useful information for users' economic decisions; the aim of IFRS 7 draws heavily on this approach. In particular, the general of objective of IFRS 7 is to enhance users' understanding about the importance of FI usage for a firm's financial position and performance. Therefore, developing and interpreting research using this theory as a theoretical lens seems appropriate; it is also supported by prior academic literature in the area.

In conclusion, O'Regan, (2006) argued that despite a number of controversial issues among the main regulatory accounting organisations, some common ground had been found, namely: (i) the CF of financial statements should be based on user requirements; (ii) recognition and measurement issues have been identified as fundamental; and (iii) increased disclosure may provide one means of satisfying user requirements without impinging on the accounting process.

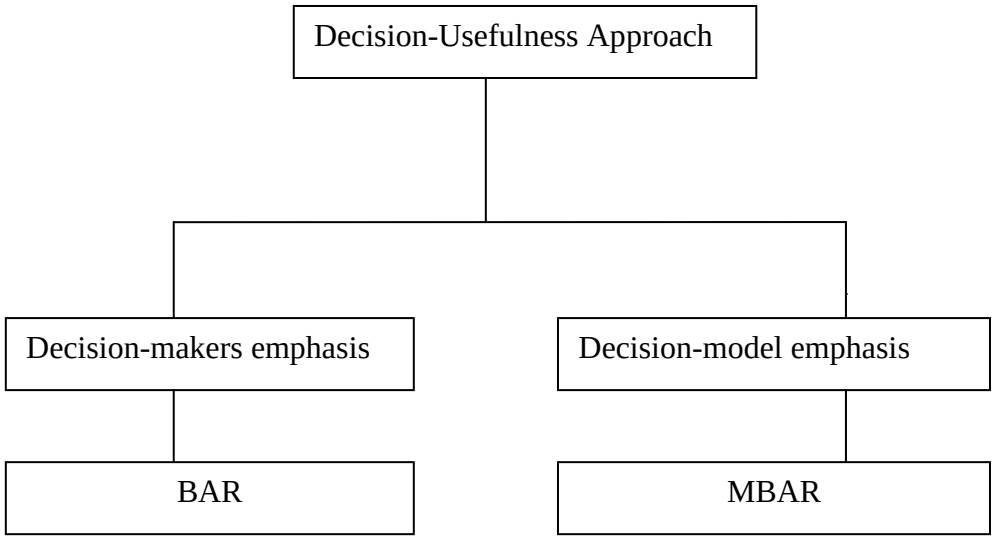
4.5 Extant Studies Employing a Decision Usefulness Approach

DU suggests that certain types of information should be provided for certain classes of users on the basis of assumed decision-making needs (Williams and Ravenscroft, 2010). According to Bebbington et al. (2001), research involving DU has adopted two central approaches. First, the decision-makers emphasis which assumes that decision-makers are best placed to realise what information they want and what the financial accounting function should provide in order to meet their needs (Mathews and Perera, 1996; Deegan and Rankin, 1997; Deegan, 2002). Second, the decision-model emphasis which assumes that accountants (preparers) know what decision-makers really need (in accordance with the objectives they wish to achieve); it is this need which should guide the contents of financial accounting flows (Hitz, 2007). A great deal of research has explored both

emphases in analysing the usefulness of financial information for decision making purposes. Hence, Bebbington et al. (2001) and Ryan et al. (2002) stated that in accordance with this division of the emphasis within the DU approach, accounting research in this area can be divided into either Behavioural Accounting Research (BAR) or Market Based Accounting Research (MBAR); BAR follows the decision-maker emphasis and MBAR concentrates on the decision-model emphasis (see Figure 4.2). Beattie (2005) indicated that both BAR and MBAR represented distinct areas of financial accounting research; the two of them allowed the DU of financial information to be investigated. Specifically, she stated that:

> "BAR examines the decision process of individual users and draws on the discipline of psychology for its concepts, methods and models. It includes surveys [conducted via questionnaire and/or interviews], experiments and case studies. MBAR examines the relationship between accounting information and share prices (or returns) [the capital market can be thought of as the aggregate investors], and relies on economics and finance as foundation disciplines" (Beattie, 2005, p. 88).

Figure 4.2: Categorisation of Accounting Research Based on the DU Approach



Note: This figure is constructed by the study based on the arguments of Bebbington et al. (2001) and Ryan et al. (2002)

According to this classification, BAR explores the relationship between current and proposed accounting information in the context of the user's needs (recipient organisation) - where the user is either an individual or a group. On the other hand, MBAR explores the relationship between accounting information and the requirements of stock market participants (a sort of collective recipient organisation) when setting the share prices for those firms whose capital is traded on an organised security exchange (Bebbington et al., 2001). In fact, Deegan and Unerman (2006) suggested that MBAR has a stronger base than BAR; they stated that:

> "While BAR tends to be fairly disjointed as different studies typically address different types of information with limited linkage between them, MBAR works on the assumption that if the capital market responds to information, the information should be useful" (Deegan and Unerman, 2006, p. 11).

4.5.1 Behavioural Accounting Research

This section focuses on how individuals react to, or behave, when provided with particular items of financial information. Deegan and Unerman (2006) argued that this stream of research can be classified as behavioural research. Libby (1975) noted that attempts to describe individual behaviour are often grounded in a branch of psychology called *Behavioural Decision Theory*; this theory has its roots in cognitive psychology, economics and statistics. In terms of BAR, Hofstedt and Kinard (1970) described it as the study of the behaviour of accountants or the behaviour of non-accountants as they are influenced by accounting functions and reports. Consequently, the objectives of BAR are: (i) to understand, explain and predict human behaviour within an accounting context (Riahi-Belkaoui, 2004); and (ii) to know how users of accounting information (investors and creditors) make decisions and what information they need (Wolk et al., 1997). The notion

of DU in BAR started from the 1970s onwards and notably appeared in the statement of the AAA: *A Statement of Basic Accounting Theory* of 1966; which stated that "Usefulness is a basic objective of accounting" (p. 34).

In terms of empirical research, a great deal of work has been done in the area of BAR. For instance, Dyckman et al. (1976) classified BAR research into four main categories: (i) the adequacy of financial statements (i.e. Singhvi and Desai, 1971; Buzby, 1974; Firth, 1979; Belkaoui and Kahl, 1981; McNally et al.,1982; Dunne et al., 2003; 2004; 2007; 2008; Finningham, 2010); (ii) the usefulness of financial statements (i.e. Chandra, 1974; Woods and Marginson, 2004); (iii) attitudes about financial reporting issues (i.e. Nelson and Strawser, 1970; Brenner and Shuey, 1972); and (iv) studies on information preferences (Snowball, 1980; Bebbington et al., 2001; Bovee et al., 2009).

The first category of studies which examined the adequacy of accounting information focused on whether users of financial statements considered available information to be adequate for their decisions[103]. Deegan and Unerman (2006) argued that studies in this category typically consist of three research methods: (i) observation; (ii) perception; and (iii) an exploration of the amount of information provided (quantity)[104]. In general, Belkaoui (1992) suggested that the main conclusions of these studies were:

> "A general acceptance of the adequacy of available financial statements, a general understanding and comprehension of these financial statements, and a recognition that differences in disclosure adequacy among financial statements are due to variables such as company size, profitability, listing status and the audit firm type"

[103] The accounting literature has stated that adequate disclosure should answer a number of questions namely: (i) for whom is the information to be disclosed; (ii) what is the purpose of the information, (iii) how much information should be disclosed, (iv) how should the information be disclosed; and (v) when should the information be disclosed (Moontiz, 1961; Buzby, 1974).

[104] Beattie (2005) documented that published articles in this category are dominated by an analysis of the annual reports (over 50%).

More recently, Finningham (2010) investigated the usefulness of the annual reports of UK firms which adopted IFRS in 2005 using one of these methods; he conducted a content analysis of the annual reports (pre- and post- IFRS implementation) and examined the reconciliation of statements provided by the sample firms. He found that: (i) the amount of information disclosed in the corporate reports increased significantly after the implementation of IFRS; and (ii) profit numbers under IFRS increased by 105% compared to that under UK GAAP. Thus, he concluded that financial information disclosed under IFRS was more useful for decision-making purposes; he stated that:

> "The implementation of IFRS had a significant impact on the accounts of UK companies; the amount of disclosure in companies' annual reports increased significantly following the introduction of the new reporting regime" (p. xi).

However, prior to the implementation of IFRS in the UK, Woods and Marginson (2004) found that, for annual reports in 1999 for a sample of 9 banks, narrative disclosures were generic in nature, the numerical data were incomplete and not always comparable, and that it was difficult for the user to combine both narrative and numerical information in order to assess a banks' risk profile (under FRS 13).

A second category of studies has explored the usefulness of financial statement data, looking at user requirements in the context of a particular decision problem; primarily decisions relating to investment in a company's share[105]. The findings of empirical studies in this category have concluded that: (i) some consensus exists between users and preparers regarding the relative importance of different items of information disclosed in financial statements; (ii) users do not rely solely on financial statements when making their decisions, but these documents are the most important information source used; (iii) a

[105] These studies include Baker and Haslem, 1973; Lee and Tweedie, 1975; 1977, 1979; Chang et al., 1983; Chenhall and Juchau, 1977; Wilton and Tabb, 1978; Anderson, 1981; Bartlett and Chandler, 1997.

sizeable part of the annual reports are neither read nor understood by users; and (iv) there is a lack of coherence among different studies concerning the different types of information investigated (Lee and Tweedie, 1979; Arnold and Moizer, 1984; Bartlett and Chandler, 1997)[106]. These findings would tend to support Bovee et al's (2009) results that end users of financial reporting information may not be capable of assessing whether financial statements are useful.

The third group of studies has attempted to measure the attitudes of various individuals and groups about the usefulness of information provided under current or proposed reporting practices (Nelson and Strawser, 1970; Brenner and Shuey, 1972; Beattie and Pratt, 2002). Two approaches have been used in this area: (i) examining users' and preparers' preferences about alternative accounting techniques; and (ii) analysing users' attitudes about general topics of concern within financial accounting. For example, Arnold and Mozier (1984) investigated the extent to which investors perceived that information within financial statements is useful for share valuation purposes. Specifically, they analysed responses to a postal questionnaire returned by investment analysts and investors. They found that among eight possible information sources the balance sheet and income statement were rated as the most important sources of financial information for decision making purposes[107]. In particular, the study found that most users in their sample read these two statements and that their average rating was number 1 and 2, respectively[108].

Using a two-group between-subjects field experiment design[109], Sharma and Iselin (2003) investigated the decision usefulness of reported cash flow and accrual information in

[106] Bartlett and Chandler (1997) replicated the work of Lee and Tweedie (1979), for modern corporate reports in the UK.
[107] This result was supported by Berry and Robertson's (2006) study which investigated UK investors' usage of financial information.
[108] The respondents were asked to rank the information sources they used starting from 1(most important).
[109] The sample represented bankers with at least three years corporate lending experience making solvency judgments using either cash flow cues or accrual cues.

solvency assessment experiment for a sample of 14 companies over the period 1994-1997. They found that: (i) judgments based on cash flow information were more accurate than judgments based on accrual information; (ii) cash flow information was more decision useful for firms experiencing financial distress; and (iii) cash flow information had greater usefulness than accrual information for assessing corporate solvency.

The final group of studies has investigated some of the reasons which lie behind certain preferences for information (Boatsman and Robertson, 1974). The focus of studies in this area is to explore how individuals and groups make judgements about what is material in terms of information content and how information is processed in decision-making (Snowball, 1980; Bebbington et al., 2001). For example, Bovee et al. (2009) empirically investigated whether the description of 'decision-useful' financial reporting information based on the IASB/FASB's 2008 ED[110] was appropriate within an international setting. The study created a causal model based on the association between qualitative characteristics of useful accounting information proposed by the 2008 ED and surveyed business information users (investors). The findings revealed that their model significantly predicted user perceptions of key information constructs (i.e. decision usefulness 76% and relevance 62%), but other constructs did not contribute significantly to the model (i.e. faithful representativeness 57%).

4.5.2 Market Based Accounting Research

This section focuses on research which has investigated the aggregate response of investors in the capital market to various accounting disclosures in order to assess the relevance of alternative accounting and disclosure choices for investors (Beattie, 2005). Therefore, the

[110] The study developed a causal model based on accounting standard descriptions and empirically tested the model from the perspective of financial information users (investors).

objective of MBAR is to explore the role of accounting and other financial information in capital markets settings; it examines the statistical relationship between accounting information and changes in share prices, returns and/or trading volume data (Deegan and Unerman, 2006). The importance of the relationship between financial statement information and share prices was first amplified by Beaver and Dukes (1972); they investigated the behaviour of share prices at the time when accounting research was published based on the argument that investment decisions of individual investors are affected by their wealth and their wealth is affected by share prices. Indeed, Bebbington et al. (2001) were more explicit when they stated that:

> "In general terms the rationale is simply that if any form of accounting information is published then its actual information value can be judged by whether there is a movement in the share price as a result. If there is, then the information has information value to the market, or, more specifically, to those who make the market [in other words it satisfies the information wants of users]" (p. 45).

The study of MBAR was driven by an interest in the ability of accounting information to predict different variables of interest such as company failure (Beaver et al., 1970; Lev, 1979) and future share prices (Beattie, 2005). In fact, research in the area was made possible by the development of the Efficient Market Hypothesis (Fama, 1965). For example, Bebbington et al. (2001) argued that MBAR assumes that equity markets are semi strong form efficient which means that all publicly available information (including accounting information) is rapidly and fully impounded into share prices in an unbiased manner as soon as it is released such that any attempt to consistently outperform the market will be unsuccessful. Thus, relevant information is not ignored by the market (Barth, 2000). Indeed, Deegan and Unerman (2006) highlighted that conclusions about the market's

reaction to certain information releases or events is generally based on evidence from a large sample of firms, with data spanning several years[111].

Beattie (2005) argued that MBAR allows the DU of accounting information to be examined empirically. O'Regan (2006) supported this view when he noted that the quantitative approach of MBAR is based on the economic facts and the efficiency of capital markets thus allowing statistical tests to be performed. In this regard, Moontiz (1961) stated that:

> "Quantitative information is very helpful in [testing] rational economic decisions; i.e., in making choice among alternatives so that actions are correctly related to consequences (p. 21).

A great deal of research has examined the impact of accounting information on the capital markets. Ryan et al. (2002) argued that the extant MBAR can be split into four (overlapping) areas, namely: methodological issues, fundamental analysis and valuation research, tests of market efficiency, and the value relevance of corporate disclosure. Research on methodological issues concentrates on earnings response coefficients, properties of analysts' forecasts and models of discretionary accruals (Dechow et al., 1995)[112]. Earnings management studies that use these models focus on the incentives which managers may have to influence share prices in an efficient market than on the contracting and political cost arguments of positive accounting theory (Ryan et al., 2002).

In terms of fundamental analysis and valuation research, MBAR has built upon the mounting evidence of market inefficiencies; it seeks to understand the determinants of

[111] Reactions of investors are experienced by their capital market transactions; favourable reactions to information are presumed to be evidenced by a price increase in the particular security, whereas unfavourable reactions to information are evidenced by a price decrease. However, no price change around the time of the release of information implies no reaction to information (Deegan and Unerman, 2006).

[112] Earnings response coefficients arise from the study of the earnings-price relation, rather than the traditional price-earnings relation. Research into analysts' forecasts examines the properties of consensus forecasts and also the properties of individual analysts' forecasts. Several discretionary models have been developed such as the Jones's model and modified-Jones model (Dechow et al., 1995).

share values when prices deviate away from intrinsic values (Penman, 1992). In a lot of investigations, the residual income valuation model developed by Ohlson (1995) is widely used. The term "quality of earnings" has recently been employed to refer to the extent to which reported earnings reflect operating fundamentals; tests in this area include event studies (both short-window and long-horizon studies) and cross-sectional investigations of return predictability (Ryan et al., 2002).

The last two areas of MBAR are overlapping and usually labelled "market efficiency" studies in the accounting literature; they examine the association between accounting information (numbers) and equity values (information content studies) and received considerable attention during the 1990s. For example, Ryan et al. (2002) argued that during the 1990s, the extant literature suggested that these varieties of MBAR studies could help standard-setters by indicating the "usefulness" of various accounting choices. In arriving at this conclusion, they drew on the early investigations by Ball and Brown (1968) who investigated the post-announcement behaviour in security returns and tentatively concluded that accounting information was useful and had information content[113]. Specifically, they discovered that positive (negative) unexpected earnings were associated with positive (negative) abnormal returns for their sample of 267 companies over the period from 1956 to 1965. However, Ball and Brown (1968) did note that about 85% of the change occurred in the months before the annual earnings information was published. Other studies which have examined the reaction of share prices to changes in accounting methods have confirmed Ball and Brown's initial conclusions (Archibald, 1972; Ball, 1972; Beaver and

[113] Beaver (1968) provided some of the earliest evidence of an association between accounting information (earnings) and share returns, using a sample of 143 companies over the period of 161-1965. He found that: (i) during the earnings announcement week, the variability of abnormal return was 67% higher that the non-announcement weeks; and (ii) trading volume was 33 per cent higher in earnings announcement weeks; and (iii) stated accounting information has useful information content.

Dukes, 1973); they found that in the announcement month prices quickly and appropriately reacted to the earnings numbers which were published.

Finally, the value relevance (usefulness) of corporate disclosure (mandatory and voluntary) has grown in importance as a research area (Beaver, 2002). For example, Ryan et al. (2002) noted that the economic consequences of corporate disclosures represent an alternative way of assessing the usefulness of accounting information without relying on the assumption of market efficiency. A majority of the extant literature in this area has employed Ohlson's (1995) model that relates share prices to book value of equity, earnings and other financial information (Brown, 2011). Indeed, Deegan and Unerman (2006) supported the idea that the usefulness of information disclosure can be measured by its impact on the capital markets; specifically, they stated that:

> "MBAR works on the assumption that if the capital market responds to information, the information should be useful. It has been used to determine whether particular mandatory reporting requirements (i.e., the introduction of new accounting standards) were necessary or effective, the rationale being that if a new accounting standard does not evoke a market reaction, then it is questionable whether the new requirements are useful or necessary in providing information to the stock market or investors" (p. 10-11).

A number of empirical studies have investigated the value relevance of corporate disclosure, adopting different proxies for valuation purposes such as cost of equity capital (Botosan, 1997; Botosan and Plumlee, 1999), bid-ask spreads (Welker, 1995), cost of debt (Sengupta, 1998), information costs (Gelb, 1999) and share prices (Gelb and Zarowin, 2002; Tsalavoutas and Dionysiou, 2012). For example, Botosan (1997) examined the relationship between a firm's disclosure level and its cost of equity capital; she constructed her own disclosure index based on information provided in the annual reports in order to gauge the economic consequences of any disclosure provided. The findings revealed a negative association between disclosure level and the cost of equity capital for firms which

were followed by a small number of analysts. The results for firms with large analyst followings might be very different (Sengupta, 1998). Adopting similar approach Lopes and Alencar (2010) supported the hypothesis that in low-level corporate disclosure environments (emerging economies) the variability in disclosure practices across firms will be larger than in their high-level disclosure counterparts (developed economies). This, in turn, suggests that the reaction of the capital markets to financial information may be stronger in emerging rather than developed market; where company disclosure may be low and more volatile. The remaining studies also documented a positive impact of the higher level of corporate disclosure on the measures used to examine the value relevance of corporate disclosures[114]. In a similar vein, Gelb and Zarowin (2002) examined the association between voluntary corporate disclosure and the informativeness[115] of stock prices; they measured corporate disclosure using the AIMR/FAF annual corporate disclosure ratings. The study supplied evidence that greater levels of disclosure were associated with stock prices that were more informative about future earnings price.[116]

In fact, both accounting regulators (including the IASB and FASB) and the extant accounting literature agree that relevance and reliability are the basic characteristics of useful accounting information (Staubus, 1976; Barth et al., 2001; FASB, 2006; IASB, 2006a). For example, Sloan (1999) argued that relevant information should be capable of making a difference in user decisions while reliable information should be

[114] Welker (1995) found that firms with high disclosure scores had lower bid-ask spreads, a proxy for the information asymmetry component of the cost of capital, and Sengupta (1998) provided evidence that greater disclosure was associated with lower costs of debt. Gelb (1999) pointed out that information costs were lower for firms that provided more informative disclosures based on their choice of stock repurchases as a means for one-time cash distributions.

[115] They defined "price informativeness" as the association between current stock returns and future earnings changes; more informative stock price changes contained more information about future earnings changes.

[116] In another example, Tslavoutas and Dionysiou (2012) investigated the value relevance of implementing IFRS for a sample of Greek listed companies. They divided their sample into two groups based on their level of disclosure. The results indicated that the value relevance of companies with a higher level of disclosure was significantly greater than that of companies with a lower level of disclosure.

representationally faithful, verifiable and neutral. In this regard, Barth et al. (2001) indicated that value relevance analysis is generally a joint test of both the relevance and reliability of financial statement information. Reviewing the value relevance literature, Barth et al. (2001) concluded that studies in this area provided a fruitful insight for standard setting in trying to examine decision useful information. In particular, they stated that:

> "Although there is no extant academic theory of accounting or standard setting, the FASB articulates its theory of accounting or standard setting in its Concepts Statements. Using well-accepted valuation models, value relevance research attempts to operationalise key dimensions of the FASB's theory to assess the relevance and reliability of accounting amounts. A primary focus of the standard-setters is equity investments … value relevance studies are designed to assess whether particular accounting amounts reflect information that is used by investors in valuing firm equity" (p. 104).

In keeping with this view, Holthausen and Watts (2001) argued that many value relevance studies have an objective beyond providing information for standard setters. Specifically, they highlighted that:

> "These studies seek to assess the usefulness of accounting information in equity valuation; they aim to determine whether accounting information is useful for valuing the firm by investigating whether the accounting information is associated with share prices" (p. 66).

In this regard, the current study employs both BAR (disclosure analysis) and MBAR (value relevance analysis) to examine the usefulness of FI disclosure provided by Jordanian listed companies' pre- and post- the implementation of IFRS 7.

4.6 Limitations of Decision Usefulness Theory

The extant accounting literature documents a number of weaknesses associated with the DU approach as an underlying CF for financial accounting research. In particular, Page (1991) argued that the DU approach assumes that users of financial information make wise decisions – that is, decisions are made by processing information efficiently and choosing a

course of action with the highest expected pay-offs. However, in reality this assumption is unrealistic because decision-makers can only ever attain restricted rationality; perfect rationality would require unlimited (perfect) knowledge which is unlikely to arise (Simon, 1976).

Another criticism of the DU approach is that it may lead to more useful accounting information which can result in better judgments about the allocation of decision-makers' resources. But this will not necessarily lead to an improvement in the general economic welfare of the population (Puxty and Laughlin, 1983). The link between useful information and societal welfare is often not classified by researchers in this area; the assumption that the provision of more useful information will lead to improvements in the population's welfare is often implicit. In addition, the theory is silent on those situations where some individuals' wealth/welfare is increased but only at the expense of other's wealth/welfare (Laughlin and Puxty, 1983).

As discussed earlier in this chapter, the Trueblood Report of AICPA (1973) adopted a DU approach, it stated that the "basic objective of financial statements is to provide information useful for making economic decisions" (p. 13). However, Cyert and Ijiri (1974) argued that the proposal of the Trueblood Report is not fully workable in practice. They have suggested that the accounting profession is only capable of attesting to a restricted range of information; one that is not broad enough to meet the needs and obligations of the three parties in financial reporting (the accounting profession, corporations and users). According to this argument, the DU approach has been criticised and questioned. For example, Armstrong (1977) commented on the Trueblood Report by stating that:

> "Could there be disagreement with a statement such as this? I am sure you will be astounded to learn that only 37 percent of our respondents were able

> to recommend the adoption of the objective. 20 percent recommended that it be rejected out of hand; and 10 percent insisted that it needed further study. It is difficult to believe that only 37 percent can agree that the basic objective of financial statements is to provide information useful for making economic decisions. I think this suggests the problem quite clearly" (p. 7).

In addition, Owen et al. (1987) and Page (1991) suggested that the DU approach does not fully explain existing accounting practices; decision-makers require information which is forward-looking, while financial statements provided data on past transactions. Hence, management is unenthusiastic about publishing more information than is perceived as *good* for the company (Laughlin and Puxty, 1983). However, policy makers (including FASB and IASB) have attempted to address this issue in their pronouncements. For instance, the disclosure requirements of IFRS 7 now mandate that firms report significant information about their future activities (i.e. risk management profile) which will enable users to evaluate the prospects of the firm.

According to Ijiri (1983), the DU approach fails to address the concept of "*rights to information*" or "*the right to knowledge*", which is often regarded as one of the most important requirements of disclosure practices. However, proponents of the DU approach argue that a need for information can be associated with a right to information (Gray et al., 1991). Hence, Likerman and Creasy (1985) considered this notion unsound and unacceptable since the need for information does not automatically give a reliable right.

Moreover, Ijiri (1983) distinguished between decision-based and accountability-based CFs and stressed the concept of fairness as a basic objective to be accomplished by an accounting system. Specifically, he suggested that:

> "In a decision-based framework, the objective of accounting is to provide information useful for economic decisions … In an accountability-based

> framework, the objective of accounting is to provide a fair system of information flow between the accountor and the accountee" (p. 75).

Williams (1987) defined the fairness concept as:

> "A noun that describes an evaluation process with two interrelated attributes; the first is that the evaluator is aware of the condition that any consequences of his or her actions will be judged as fair or unfair. This does not imply that the evaluator knows what is or is not fair but merely that it recognises that the results of some of its actions have implications that will be judged by others using some criteria of justness ... The second attribute of the process is that the evaluator attempts to adopt a perspective of impartiality" (p. 171).

According to this definition, the DU approach has been criticised for failing to address the concept of fairness, since it does not encompass any such criteria (Ijiri, 1983; Williams, 1987). Hence, fairness as a property does not exist when the DU approach in any meaningful sense (Ijiri, 1983). In keeping with this view, Coy et al. (2001) contended that while fairness is missing from a DU framework, it is a key for one based on a stewardship. On a similar theme, Tower (1993) argued that the objective of reporting under accountability framework is to achieve fairness to both sides - accountor and accountee - whereas this notion is not a requirement of a decision based approach.

4.7 Theoretical Framework of the Current Study

Despite previous criticisms of the DU approach, Staubus (2000) argued that it has become fundamental to information disclosure studies; its theoretical and practical implications have played a major role in the formation of financial accounting research across the world. As a result, a decision was taken to adopt the DU approach as the theoretical framework underpinning the current thesis; the objective of the current research is to investigate the impact of IFRS 7 on FI disclosure and to determine whether such disclosures are value relevant. Thus, the DU approach seemed appropriate for a number of reasons.

First, the DU approach has been widely adopted by several previous financial accounting studies (both BAR and MBAR) in developing countries (Al-Bogami, 1996; Abu-Nassar and Rutherford, 1996; Al-Mubark, 1997; Al-Khater and Nasser 2003; Naser and Nuseibeh, 2003; Mirshekary and Saudagaran, 2005; Zeghal and Mhedhbi, 2006; Mardini, 2012). For instance, Almahmoud (2000) investigated the usefulness of information in the annual reports of Saudi corporations listed on the Saudi Stock Market. He employed two methods of analysis: a questionnaire survey for institutional and individual investors and an analysis of the reactions of share prices around the release dates of the annual reports of Saudi Arabian companies. He found that: (i) respondents in the Saudi stock market used the annual report information to make investment decisions; and (ii) share prices reacted to the release of these annual reports.

This suggests that the framework would provide a relevant backdrop against which the Jordanian results of the current investigation can be evaluated. With respect to Jordan, relatively few financial accounting studies (BAR or MBAR) have adopted the DU approach to examine the decision usefulness of financial statement information (Al-Khouri and Balqasem, 2006; Haddad et al., 2009; Suwaidan et al., 2007; Al-Akra and Ali, 2012; Mardini, 2012). In general, these studies concluded that (i) the publication of annual reports is a very influential factor in the decision-making processes of investors and has some impact on share prices; (ii) Jordanian listed firms disclose a significant amount of information; and (ii) a higher level of disclosure among Jordanian firms is associated with narrower bid-ask spreads and hence an increase in stock market liquidity. For example, Al-Akra and Ali (2012) examined the value relevance of voluntary disclosure resulting from privatisation and the accompanying governance reforms, for 46 privatised Jordanian firms over the period 1996 to 2004. They constructed a disclosure index to examine the level of voluntary disclosure provided by the sample firms. The results indicated a significantly

positive association between the level of voluntary disclosure and share prices. In addition, the study found that voluntary disclosure explained 32.6% of the market values of the firms. In another example, Mardini (2012) examined the usefulness of IFRS 8 for Jordanian listed companies; he investigated the annual reports (by a disclosure index) and evaluated the perceptions of users and preparers about the impact of IFRS 8 on segmental reporting. The study found that: (i) the level of corporate segmental reporting significantly increased; (ii) the usefulness of the introduction of IFRS 8 had been raised by the users and preparers of such information. Other studies arrived at similar results (Al-Khouri and Balqasem, 2006[117]; Suwaidan et al., 2007[118]; Haddad et al., 2009[119]). However, other theoretical frameworks have been employed such as an accountability approach[120], but this was not selected in the current study because it was thought to be inappropriate for the research hypotheses being investigated. The extant financial reporting literature emphasises the importance of both decision-usefulness and accountability theories. In particular, Ijiri (1983) argued that a conceptual framework can be decision-based or accountability-based and the choice critically influences the resulting framework. Moreover, Ijiri (1983) distinguished between decision-based and accountability-based conceptual frameworks and stressed that the difference related to the emphasis placed on the concepts of usefulness and fairness as the basic objectives to be accomplished by an accounting system. Specifically, he suggested that:

> "In a decision-based framework, the objective of accounting is to provide information useful for economic decisions … In an accountability-based

[117] This study investigated the decision usefulness of the timing of the annual report announcements and its impact on share prices.
[118] This study investigated the decision usefulness of IAS 14 on Jordanian industrial listed firms, using disclosure index to measure disclosure level.
[119] This study investigated the level of voluntary disclosure and its association with stock market liquidity.
[120] Gray et al. (1988) defined accountability as "the onus, requirement or responsibility to provide an account or reckoning of the actions for which one is held responsible" (p. 2). Perks (1993) defined accountability as "Accountability as a concept may be traced to the separation of ownership from management in business organisations and is related to the concept of stewardship whereby managers provide an account to owners" (p. 24).

framework, the objective of accounting is to provide a fair system of information flow between the accountor and the accountee" (p. 75).

According to the objective of the current study which aims to investigate the usefulness of FI disclosure, the decision-usefulness approach seems to provide a better fit; although it is acknowledged that an accountability framework could have been applied; however, this is outside the scope of the current study. In addition, other theories have been considered as less relevant to the current study such as Islamic accountability theory[121], regulatory theory[122], and agency and signalling theories[123].

Second, the CF underpinning International Financial Reporting Standards (IFRS) is based on the decision usefulness criterion. This suggests that disclosure requirements for the accounting standards (including IFRS 7) are determined on the basis of this approach. In

[121] Islam represents the religious beliefs of over 95% of the Jordanian population (Al-Shiab, 2003). However, the political (democratic) system and the economic (open market) structure as well as the strong relationship between Jordan and Western countries means that business environment in general and accounting practices in particular, tend to not be dominated by Isalmic thinking (AL-Akra et al., 2009). For example, even though Jordan is an Muslim country, Jordanian companies apply IAS/IFRS in the preparation of their financial statements and there is no evidence of any demand for Islamic accounting rules in the country. Thus, the current study considers that the adoption of Islamic accountability theory in inappropriate as the underlying assumptions (Islamic values) of such theory are not prominent in Jordanian accounting practices.

[122] In accounting context, regulatory theory refers to the rules that govern accounting practices (Bertomeu and Magee, 2010). Regulatory theory has often been implicitly employed in accounting research (Inchausti, 1997). However, over recent years, there has been a fundamental shift in the regulation of accounting internationally in terms of rules and the institutions involved (Wagenhofer, 2011). In particular, Wagenhofer (2011) has argued that the concentration on the decision usefulness approach in the conceptual frameworks of both FASB and the IASB explains some of the changes which have taken place in the rules; from government-driven accounting regulation to private accounting standards. The current study aims to examine the usefulness of FI disclosure laid down by the accounting standards rather than to investigate the extent to which such standards improve the level of compliance with accounting regulation. Hence, it was decided that regulatory theory was inappropriate for the current study.

[123] Agency theory emphasises the principle-agent issue in the separation of ownership and control within a company (Jensen and Meckling, 1976), while signalling theory is concerned with information asymmetry in a market (Morris, 1987). A significant overlap exists between them; rational behaviour is common to both and information asymmetry in signalling theory is implied by positive monitoring costs in agency theory (Morris, 1987). Indeed, both theories attempt to explain why companies make information public. In accordance with the purpose of the current study, both agency and signalling theories are considered less relevant than decision-usefulness for the current investigation as the objective of this study is to examine the usefulness of FI disclosure pre- and post- the implementation of IFRS 7; this thesis does not try to explain why companies provide such information in their financial statements.

addition, the Jordanian government has adopted IAS/IFRS since 1997 and required all listed public shareholding companies in Jordan to fully adhere to standards issued by the IASB without any modifications. As the DU approach underpins the assumptions of the CF for the IASB, it seems reasonable that DU should be adopted by this study; it will allow the results to evaluate IFRS 7 against the claims of the body issuing the standard.

Specifically, the main focus of this study is to investigate the impact of the introduction of IFRS 7 on FI disclosure and its value relevance within Jordan. Hence, it is suggested that this approach is relevant to evaluate the usefulness of this standard by an analysis of the corporate reports and an investigation of its value relevance. In this respect, the DU approach has been adopted by the FASB and IASB as a CF in the process of the preparation of accounting standards (including IFRS 7). In particular, FASB (1977) stated that:

> "The effectiveness of markets and governments in allocating scarce resources among competing uses is enhanced if those who make economic decisions have unbiased information that reflects the relative standing and performance of business enterprises to assist them in evaluating alternative courses of action and the expected returns, costs, and risk of each. The function of accounting, financial reporting, and financial statements is to provide some of the information that is useful to those who make economic decisions about business enterprises and about investments in or loans to business enterprises" (p.4).

Third, the Jordanian stock exchange is thought to be one of the most organised and largest emerging capital markets throughout the world (relative to GDP of the country); it has a relatively long history having been established in 1975 and supported by developing a robust legal framework (ROSC, 2004). Accordingly, one might argue that the aggregate behaviour of the market is an appropriate measure of investors' views on the usefulness of accounting information. Therefore, this study employs both streams of financial accounting research, namely: BAR (by the analysis of the corporate reports) and MBAR (by examining

the association between information disclosure and firm value). In this regard, positive and significant associations between accounting information and capital market measures are tested for, in Jordan, and compared with findings from previous accounting research (Haddad et al., 2009; Omar, 2007)

4.8 Conclusion

A theoretical framework prevents accounting standards from becoming ad hoc and transitory; without a CF, accounting standards might be based on the most expedient solution to a particular issue rather than a solution that is consistent with a unified theory of accounting" (Gore and Zimmerman, 2007, p. 30). It is certainly the case that the presence of a theoretical framework has become a critical component for accounting research which enables researchers to interpret their findings in accordance with the given context. Thus, the current study adopts the DU approach as an underlying theoretical framework for the study. The main objective of this study is to investigate the usefulness of FI disclosure, based on the differing requirements of IAS 30, IAS 32 and IFRS 7. This objective is achieved by: (i) investigating the level of FI disclosure in the annual reports of the Jordanian listed firms; and (ii) investigating the value relevance of FI disclosure. Therefore, the DU approach has been adopted in the current study. Accordingly, this chapter outlines the importance of theory in conducting research, and is followed by a discussion of the development of DU and its adoption in the extant of academic and professional literature.

Chapter Five

Research Methodology and Methods

5.1 Introduction

A significant issue which researchers in the social sciences face is the decision about the philosophical assumptions upon which their research will be based (Hoque, 2006). Burrell and Morgan (1979) argued that researchers are expected to build their research, explicitly or implicitly, on certain philosophical assumptions about the nature of the social sciences and the nature of society. Hence, understanding the researchers' philosophical assumptions is essential for identifying the most appropriate research methodology and methods to be employed (Collis et al., 2003). The main aim of this chapter is to provide an overview of the research methodology and methods that are used in the current thesis. This aim is achieved by discussing several related issues. Section 5.2 outlines the main philosophical assumptions underpinning the work which includes views on the nature of understanding as well as knowledge in social science research and beliefs about the nature of society. Section 5.3 discusses Burrell and Morgan's (1979) typology of paradigms as well as outlining the research methodology employed in the current study. Section 5.4 presents the general background behind the research methods used in the study. The disclosure index method is then described in detail in Section 5.5. Section 5.6 outlines the value relevance model of FI disclosure which is used in the current empirical investigation. Section 5.7 discusses the statistical analysis that informs the current study. Finally, a conclusion to the chapter is provided in Section 5.8.

5.2 Philosophical Assumptions

Research is concerned with finding out something without which human decision-making is less informed (Nwokah et al., 2009); it seeks to find explanations of unexplained phenomena, to clarify doubtful propositions and to correct inaccurate facts (Crotty, 1998). Collis and Hussey (2009) argued that the process of conducting research is based upon the

research philosophy and the research paradigm adopted; in turn these affect the research methodology. Indeed, Burrell and Morgan (1979) argue that philosophical assumptions which underpin any research influence the research process of examining, collecting, analysing and interpreting findings; they affect the whole methodology of the research. The extant literature suggests that research in the social sciences considers various philosophical assumptions about the nature of scientific enquiry and the nature of the society in which the research is conducted (Nwokah et al., 2009). In this regard, Burrell and Morgan (1979) provided a framework for understanding the paradigmatic choices to be made in social science research; the framework consists of two main dimensions, namely: (i) a researcher' view of the social world; and (ii) a researcher' view about the regulation or control of society.

Views about society range along a continuum from a subjective end to an objective end; location on this continuum is based upon four assumptions regarding the nature of the world (Laughlin, 1995). According to Burrell and Morgan (1979), these assumptions are related to the: (i) ontology (realism vs. nominalism); (ii) epistemology (positivism vs. anti-potivism); (iii) views of human nature (determinism vs. voluntarism); and (iv) methodology (nomothetic vs. ideographic) of the researcher. These assumptions have a direct effect on the research methodology employed and influence the process of selecting an appropriate research paradigm (Burrell and Morgan, 1979). Figure 5.1 outlines these assumptions. First, ontological assumptions are concerned with the researcher's beliefs about the nature of reality - "the study of being" (Crotty, 1998, p. 10). In particular, Collis and Hussey (2009) argued that the fundamental debate on ontology relates to *nominalism* (subjectivism) and *realism* (objectivism). According to Burrell and Morgan's (1979) approach, the nominalism perspective suggests that the researcher is not independent from his/her

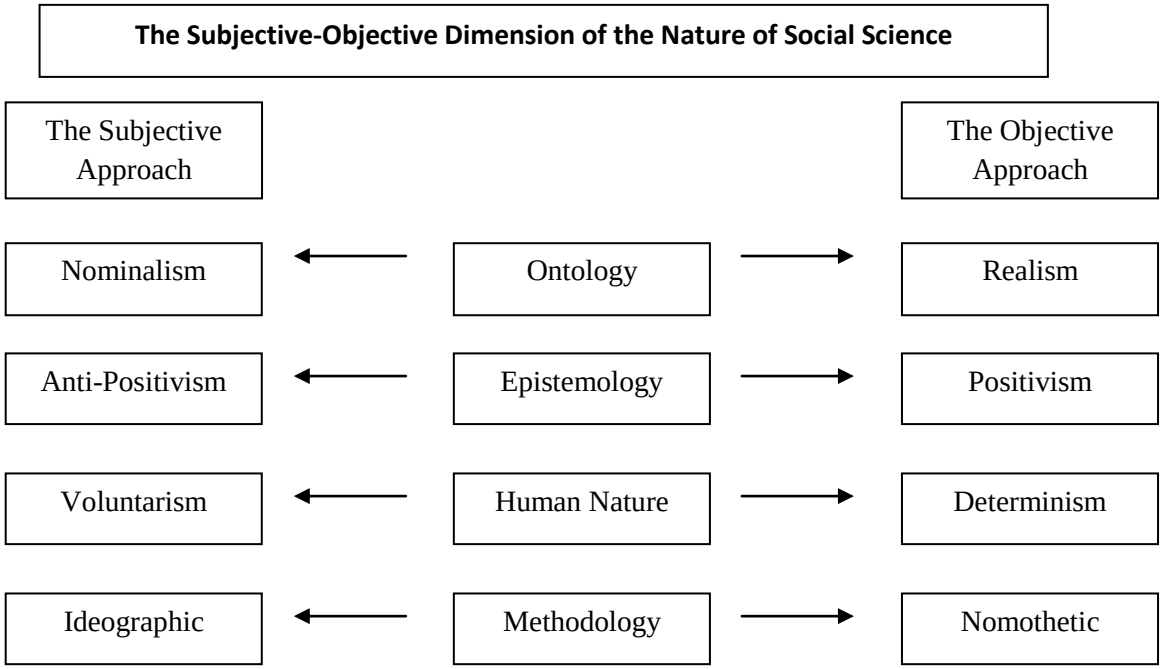
previous experience; it assumes that the views of the researcher are subjective when exploring social phenomena. Hence, researchers with different backgrounds can come up with varying conclusions about the same phenomenon. On the other hand, a realism view of the world perceives that reality is an observable fact which is not influenced by human thoughts and prior knowledge (Collis and Hussey, 2009). Indeed, the realism position sees facts as concrete structures in the social world that have an existence independent of individual perceptions (Burrell and Morgan, 1979). Therefore, every scientist should arrive at the same conclusion about the issue being investigated.

The second assumption focuses on epistemology; it refers to the process of dealing with methods undertaken when acquiring knowledge (Ryan et al., 2002). Specifically, epistemology refers to "the theory of knowledge embedded in the theoretical perspective and thereby in the methodology" (Crotty, 1998, p. 3). Hence, it is concerned with assumptions about the nature of knowledge and how social scientists understand the social world that they are investigating (Hussey and Hussey, 1997). A researcher's view on epistemology can range from *positivism* to *anti-positivism* (Burrell and Morgan, 1979); while positivists see knowledge as quantitative and objective in nature with the researcher being independent of that which is being researched, anti-positivists view knowledge as qualitative and subjective; they believe that the researcher interacts with what is being researched (Nwokah et al., 2009).

The assumption about human nature is concerned with the relationship between human beings and their environments; it revolves around the model of man that is reflected in any given social scientific theory (Ryan et al., 2002). According to Burrell and Morgan (1979), at one end of the spectrum man can be value free and unbiased while at the other end man

is value-laiden and biased. In fact, a researcher's assumption about human nature rests on two concepts: *determinism* and *voluntarism*. While a determinist view sees human beings and their knowledge as the product of their environment, a voluntarism view suggests that human beings are independent and free-willed; it sees individuals as the creators and controllers of their environment (Burrell and Morgan, 1979).

Figure 5.1: Assumptions Regarding the Nature of Social Science



Note: This figure shows Burrell and Morgan's (1979) scheme for analysing assumptions regarding the nature of social science. Source: Burrell and Morgan (1979, p: 3).

The final assumption of Burrell and Morgan's (1979) framework – methodology - refers to the theory of how research should be undertaken. Saunders et al. (2009) argued that the notion of methodology is concerned with how a researcher gains knowledge about the world; critically, the methodology employed by a researcher is formed by his/her ontological and epistemological assumptions. The approach to methodology can range from *nomothetic* to *ideographic* (Collis et al., 2003). Under a nomothetic position, the social world is seen as being similar to the physical or natural world and information can be

collected through the use of protocols and procedures that stem from the natural sciences (Burrell and Morgan, 1979); specifically, statistical techniques are employed to test hypotheses and analyse research information collected via quantitative research techniques (Hussey and Hussey, 1997). On the other hand, an ideographic perspective sees knowledge as something that has to be personally experienced (Burrell and Morgan, 1979); thus, information can best be gathered by employing qualitative research techniques such as case studies and interviews (Hussey and Hussey, 1997).

The second dimension of Burrell and Morgan's (1979) framework concentrates on a researcher's view about society; this view varies across a continuum from assumptions that relate to the sociology of regulation and the sociology of radical change. The sociology of regulation end of this continuum focuses on providing explanations about the need for controlling dealings between humans in order to allow society to continue as a meaningful entity (Burrell and Morgan, 1979). In particular, they stated that the sociology of regulation is:

> "Essentially concerned with the need for regulation in human affairs; the basic questions which it takes tend to focus upon the need to understand which society is maintained as an entity. It attempts to explain why society tends to hold together rather that fall apart" (p. 17).

Indeed, the sociology of regulation concentrates on studying the status quo instead of seeking fundamental changes within a system (Burrell and Morgan, 1979). By contrast, the sociology of radical change concentrates on the search for change and conflict; it emphasises the separation and division of interests, non-regulatory and conflict structures and imbalanced allocations of power which provide the potential for radical change (Burrell and Morgan, 1979). In addition, Gallhofer and Haslam (2003) argued that radical

change believes in emancipation from the system by altering society. Specifically, Burrell and Morgan (1979) stated that the sociology of radical change is:

> "Essentially concerned with a man's emancipation from the structures which limit and stunt his potential for development. The basic questions which it asks focus upon the depravation of man, both material and psychic" (p. 17)

Once the researcher has clarified her/his philosophical assumptions, a research paradigm can be identified (Hoque, 2006).

5.3 Burrell and Morgan's Paradigms

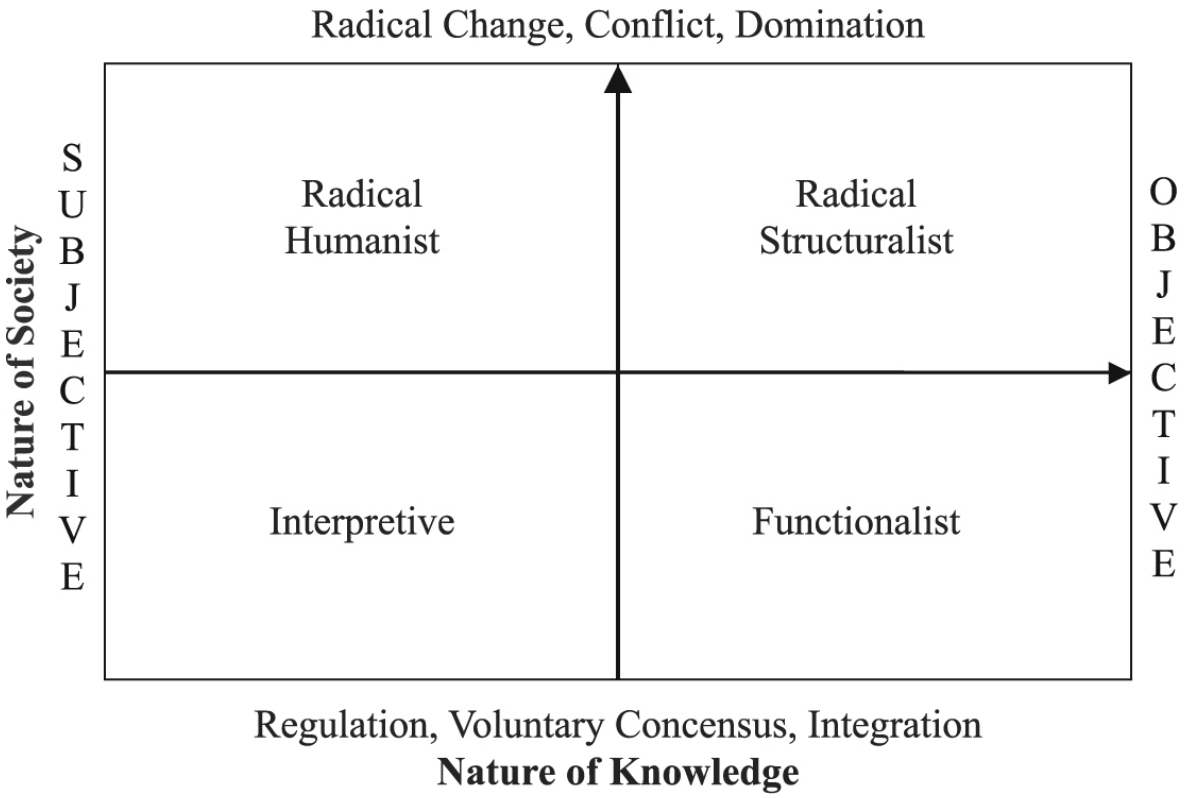
Creswell (1998, p. 74) stated that a paradigm is "a basic set of beliefs or assumptions that guide the researcher's inquiries"; it offers a framework comprising an accepted set of theories, methods and ways of defining data (Collis and Hussey, 2009). Indeed, Burrell and Morgan (1979) argued that selecting a paradigm when doing research yields several advantages: (i) it clarifies the assumptions regarding the researchers' view about the nature of science and society; (ii) it provides an understanding how other researchers approach their work; and (iii) it helps in designing and planning the research in order to make the researcher aware of where they stand and to map out further directions in relation to her/his attitudes and conceptions. According to Burrell and Morgan (1979), a paradigm can be used in three different ways: (i) it can be philosophically employed to reflect fundamental notions about the world; (ii) it can be used socially to develop guidelines for the researcher in carrying out the research; and (iii) it can be used technically to identify the methods and techniques that should be adopted for carrying out an investigation.

Combining Burrell and Morgan's (1979) subjective-objective dimension of social science with the regulation-radical change dimension of society resulted in four sociological

paradigms of social science research, namely: (i) the functionalist; (ii) interpretive; (iii) radical structuralist; and (iv) radical humanist paradigms (see Figure: 5.2). They argued that:

> "Each of the paradigms shares a common sets of features with its neighbors on the horizontal and vertical axes in terms of one dimension but are different in terms of the other dimension, therefore, they should be viewed as contiguous but separate; they are contiguous because of the shared characteristics, but separate because the differentiation is of sufficient importance to warrant treatment of the paradigms as four distinct entities" (p. 23).

Figure 5.2 Four Paradigms for the Analysis of Social Theory



Note: This figure shows Burrell and Morgan's (1979) framework of the four sociological paradigms; locations of approaches to change are positioned for each paradigm. Source: Burrell and Morgan, 1979, p. 22.

The sociology of regulation encompasses two paradigms: the functionalist and the interpretive paradigms. The functionalist paradigm assumes that society has a concrete existence and follows a certain order; scientists do not see any roles for themselves within

the phenomenon that they analyse using rigorous techniques based on scientific methods – "*That is*" an ability to observe "*what is*" without affecting the phenomenon being studied (Burrell and Morgan, 1979). Indeed, Ardalan (2003) argues that the functionalist paradigm seeks to provide explanations of social affairs and to generate regulative sociology; it emphasises the importance of understanding order and stability in society and the way in which these can be maintained. Saunders et al. (2009) argued that the functionalist paradigm assumes that there are external rules and regulations governing the external world; specifically, they stated that:

> "The functionalist paradigm provides rational explanations of why a particular organizational problem is occurring and develops a set of recommendations within the current structure of the organization's current management" (p. 41).

By contrast, the interpretive paradigm sees the social world as a process that is created by individuals. Ardalan (2003) pointed out that an interpretive paradigm assumes that scientific knowledge is socially constructed and socially sustained; the significance and meaning of this knowledge can only be understood within its immediate social context. Burrell and Morgan (1979) argued that the interpretive paradigm is informed by a concern to understand the social world as it is and at the level of subjective experience; it seeks explanations within the realm of individual consciousness and subjectivity by reference to the participant as opposed to the observer of action.

While the functionalist researcher attempts to provide explanations of human nature and generalise findings from a reality based on facts, the interpretive researcher observes the activities of individuals in order to arrive at a better understanding of the aspect of society which is being examined (Dhillion and Backhouse, 2001). Although these two paradigms are substantially different, Burrell and Morgan (1979) argued that researchers who employ

either a functionalist or an interpretive paradigm accept regulation and the stability of society. Indeed, Burrell and Morgan (1979) stated that:

> "While researchers in the functionalist paradigm employ an objective perspective on reality and utilise a realistic ontology, a positive epistemology, a deterministic view of human nature and a nomothetic methodology, their counterparts in the interpretive paradigm adopt a subjective perspective on reality which employ a nomalistic ontology, anti-positive epistemology, a voluntaristic view of human nature and an ideographic methodology" (p. 24).

The upper two quadrants of Burrell and Morgan's framework includes the radical structuralist and radical humanist paradigms; both aim to understand the social structures of society from a Marxist ideology which assumes that power and wealth are distributed unequally (Burrell and Morgan, 1979). The radical structuralist paradigm assumes that reality is objective and concrete, and it uses scientific methods to find the order that prevails; it views society as a potentially dominating force (Ardalan, 2003). On the other hand, the radical humanist paradigm assumes that reality is socially created and sustained; it aims to change the social world by altering society's consciousness (Ardalan, 2003). While the radical structuralist paradigm adopts an objective perspective like its functionalist counterpart, the radical humanist paradigm follows a more subjective perspective (Burrell and Morgan, 1979).

Burrell and Morgan (1979) argued that a researcher can employ only one paradigm at any point in time; specifically, they stated that:

> "The paradigm of the researcher depends upon social-scientific reality; the four paradigms are mutually exclusive in the sense that the researcher cannot be located in more than one paradigm at a given point of time" (p. 25).

This contention has been criticised by a number of researchers (e.g. Chau, 1986; Deetz, 1996; Clair, 1999)[124]. Indeed, Chua (1986) labeled these paradigms as "unsatisfactory dichotomies" (p. 626); she argued that the assumptions underpinning Burrell and Morgan's framework lie on a continuum and do not involve mutually exclusive dichotomous paradigms, hence, researchers can use more than one paradigm at any one time. Nevertheless, Ardalan (2003) suggested that knowledge about paradigms makes scientists aware of the boundaries within which they approach their subject; each of these paradigms implies a different way of theorising in accounting and finance.

The aim of this study is to investigate the impact of a new FI reporting standard on the disclosure practices of Jordanian listed companies as well as examining the value relevance of such information from an investor perspective. The study adopts an objective perspective; hence, the functionalist paradigm is employed. The functionalist paradigm seems to fit the objectives of this thesis' research. According to the objectives of this thesis, the researcher is investigating how the new accounting regulation is implemented rather than how society might be changed. Specifically, the researcher is examining the impact of IFRS 7 rather than trying to change the way in which Jordanian companies disclose FI information. The functionalist paradigm is strongly linked to a positivistic approach in accounting research (Chua, 1986). In this regard, Watts and Zimmerman (1986) argued that a positivistic approach in accounting research focuses on explaining and predicting actual

[124] Chua (1986) criticised Burrell and Morgan's (1979) framework by arguing that it ignores the idea that individuals are influenced by their social environment. She adopted a strongly relativist position of scientific truth and reasoning. Chua (1989) argued that her framework could be critically used for evaluating other research perspectives in accounting and finance. In addition, Deetz (1996) criticised Burrell and Morgan's framework by suggesting that it obscures key differences in research orientations; they argued that this may lead to poorly formed discussions about the research findings. Finally, Clair (1999) argued that Burrell and Morgan's framework does not give consideration to either the postmodernist ideology which seems missing or lacking under functionalism.

accounting practices and their consequences. Hence, a positivistic approach in accounting seeks to generalise and predict cause-effect relationships by an analysis based on hypothesised associations (Collis and Hussey, 2009). It is based on the ontological assumptions that there is an objective reality which is independent of human beings and exists regardless of whether or not they are aware of it (Chua, 1986). Consequently, the aim of such research is to find universal regularities and causal relationships between the variables being investigated.

Accounting research in this field is quantitative in nature, hypothesis driven, informed by statistical testing and attempts to generalise on the basis of the analysis carried out (Hoque, 2006). Indeed, Hopper and Powell (1985) argued that much of accounting research can be located in the objective and regulatory region of the functionalist paradigm; specifically, they have stated that:

> "Organizations are treated as stable empirical phenomena that have, or should have, unitary goals, normally profit maximisation. Human nature is taken to be calculative and instrumentally rational, but essentially passive. Thus, control accounting is depicted as stabilising and programming behaviour by allocating to positions sub-goals derived from the organizational goals, and monitoring performance by formal feedback. Compliance is reinforced by tying performance to economic reward structures. Accounting information for decision-making is confined to economic evaluations to reveal profit maximizing alternatives. Throughout, the ontology is realist: there is assumed to be a real state of economic affairs and organizational relationships which the accounting system seeks to model" (p. 434).

As a result of the researchers' objective view of the world, the current study positions itself within the functionalist paradigm. Consequently, the study employs statistical analyses to test the research hypotheses which are constructed and explained in accordance with the theoretical framework established from the relevant literature. The study believes that the requirements of IFRS 7 represent specific and itemised information (facts) that should be

disclosed; this implies that the study employs a realist ontology. Thus, a positivist epistemology position is adopted as these requirements of the IFRS 7 should be included in corporate annual reports. A deterministic view of human nature is assumed as the information in IFRS 7 is provided in order to enhance users' economic decision-making. Finally, this study makes assumptions about how users of financial information should behave and react (as aggregate behaviour) to the news which is being disclosed to the capital market participants; thus, a nomothetic methodology is adopted.

According to Burrell and Morgan (1979), each theory can be related to one of the four paradigms; the four paradigms are based on different assumptions about the nature of social science (e.g. the subjective-objective dimension) and the nature of society (e.g. the dimension of regulation-radical change). The current study employs decision usefulness theory which has been linked by the prior literature to the functionalist paradigm (Hopper and Powell, 1985). In addition, the decision usefulness theory seems appropriate when the functionalist paradigm is adopted; this theory accepts the status quo and suggests that financial statements contain important information for investors (i.e. a reality about a corporation). Hence, the study adopts decision usefulness theory in the context of a functionalist perspective based on BAR and MBAR. Accordingly, the study employs quantitative research methods in order to undertake the planned investigation.

5.4 Research Methods

Financial reporting is part of the social science research field; it is affected by the philosophical assumptions of the researcher and influences the methodology employed (Crotty, 1998); "it is a way to systematically solve the research problem; it may be understood as a science of studying how research is done scientifically" (Kothari, 2004, p.

8). It has been widely recognised that research methodology encompasses qualitative and quantitative dimensions (Bailey, 1978). In terms of quantitative research methodology, it was first developed for studying phenomena in the natural sciences; it deals with data that can be counted and uses a statistical manipulation of numbers to summarise and interrogate information (May, 2001). Indeed, Bryman (1988) stated that:

> "Quantitative research is a genre which uses a special language which appears to exhibit some similarity to the ways in which scientists talk about how they investigate the natural order – variables, control, measurement and experiment" (p. 12).

On the other hand, qualitative research methodology was originally developed for studies in the social sciences to allow researchers to examine social and cultural phenomena (May, 2001; Locke et al., 2009). Specifically, Bryman (1988) stated that:

> "Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter; hence, qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena with respect to the meanings people bring to them" (p. 45).

The selection of a qualitative and/or quantitative research methodology relies on the types of question being addressed, the nature of the population being studied and on the overall objectives of a project (Mariampolski, 2001). For the purpose of this study, quantitative research can be conducted since the research strategy emphasises quantification in the collection and analysis of data; it adopts an objective approach to the relationship between theory and research. This suggests that a realist ontology, a positivist epistemology, a determinist view of human nature and a nomothetic methodology are the basic assumptions of the current study.

Hussey and Hussey (1997) argued that once a researcher identifies a research methodology, appropriate research methods should then be selected to address the research questions

being investigated. Research methods include all of the techniques that are used for conducting the research; they refer to the methods that the researcher uses in performing research operations (Kothari, 2004, p. 7). More precisely, Crotty (1998) suggested that research methods are "the procedures used to gather and analyse data related to the research question or hypothesis" (p 3). Indeed, Kribat (2009) argued that the extant literature within the social sciences has documented several ways of collecting data such as questionnaire surveys, observations, interviews, content analysis and case studies. In this regard, there are many factors affecting the choice of method for any given study such as sample size, time frame, the environment and the conditions under which the study is conducted (Bryman and Cramer, 2001).

The objective of the current study is to investigate the usefulness of FI disclosure based on the requirements of IFRS 7 relative to the previous disclosure requirements for Jordanian listed companies. Previous investigations in the accounting literature have employed a variety of methods when assessing the usefulness of corporate disclosures. For instance, Behavioural Accounting Research (BAR) has focused on the perceptions of users and preparers of the financial statements (e.g. Lee and Tweedie, 1979; Arnold and Moizer, 1984; Bartlett and Chandler, 1997; Mardini, 2012), the level of disclosure (e.g. Singhvi and Desai, 1971; Firth, 1979; Woods and Marginson, 2004; Finningham, 2010; Mardini et al., 2011), and/or disclosure ratings provided by recognised agencies such as AIMR, CIFAR, and FAF (e.g. Lang and Lundholm, 1993; Sengupta, 1998; Kothari et al., 2009)[125]; the last two techniques typically measure the quantity of information which is included in the financial statements as a result of requirements laid down by standard setters (Beattie et al.,

[125] This method has been criticised for being based on analysts' perceptions rather than direct measures of actual disclosure, the lack of clarity as to whether the analysts on the panels take the ratings seriously, the unclear basis on which firms are selected for inclusion, and the potential biases that analysts bring to the ratings (Healy and Palepu, 2001).

2004). By contrast, Market Based Accounting Research (MBAR) has employed capital-market based measures of performance (share prices or trading volume) to assess whether accounting information is value relevant (Ball and Brown, 1968; Archibald, 1972; Ball, 1972; Beaver and Dukes, 1973; Barth et al., 1996; Venkatachalam, 1996; Hassan et al., 2006; Li and Gao, 2007; Hassan and Mohd-Saleh, 2010). The current study employs both BAR and MBAR: it examines the level of FI disclosure provided in the financial statements based on the requirements of IFRS 7 and investigates the association between FI disclosure and firm value.

For the purpose of the current study, a disclosure index method is employed to examine the extent of FI disclosure for a sample of Jordanian listed companies. Indeed, such an approach has been employed by many previous studies to assess the usefulness of corporate disclosures in both developed and developing countries[126] (e.g. Singhvi and Desai, 1971; Choi, 1973; Buzby, 1974; 1975; Firth, 1979; Chow and Wong-Boren, 1987; Cooke, 1992; Wallace et al., 1994; Meek et al., 1995; Inchausti, 1997; Botosan, 1997; Hope, 2003a; b; Abd-Elsalam and Weetman, 2003; Naser and Nuseibeh, 2003; Coy and Dixon, 2004; Hassan et al., 2009). In terms of the disclosure index, Marston and Shrives (1991) have argued that one test of the usefulness of a research tool is the extent to which it is used; they suggested that a research tool will stop being used if it produces poor results. In particular, they stated that:

> "The disclosure index has provided researchers with the expected answers to their research questions or hypothesises in many cases; hence, if company information disclosure continues as a focus of research it is likely that the disclosure index will continue to be used" (p. 207).

[126] Disclosure studies in developing countries have tended to examine the level of compliance with the requirements of corporate disclosure regulations because of a relaxed enforcement policy for accounting standards compared to that of developed countries (Ali et al., 2004).

This is the first method employed in the current thesis for examining the usefulness of FI disclosure; the second method is used to test the association between FI disclosure and firm value. The extant literature in the value relevance area has typically employed the Ohlson (1995) model for measuring the impact of information on equity prices or market value. Hence, the study uses a multiple regression equation based on the Ohlson model to measure whether FI disclosure is value relevant. Therefore, the current study uses two research methods to achieve its objectives: namely, a disclosure index analysis and a value relevance model. These two methods were employed to provide answers for the hypotheses proposed by the current study.

The extant literature in this financial reporting area indicated that the introduction of new accounting standards resulted in: (i) an increase in the number of companies supplying FI disclosure (Edwards and Eller, 1995; Chalmers and Godfrey, 2004; Chalmers, 2001; Hassan et al., 2006b); (ii) an improvement in the level of corporate FI disclosure provided (Roulstone, 1999; Chalmers and Godfrey, 2000; Chalmers, 2001; Dunne et al., 2004; Woods and Marginson, 2004; Hamlen and Largay, 2005; Lopes and Rodrigues, 2006; Strouhal, 2009; Murcia and Santos, 2010); and (iii) a difference in corporate FI disclosure practices across sectors (Dunne et al., 2003, Hassan et al., 2006b). Indeed, this literature provided evidence about the usefulness of new accounting standards concerning FIs; a larger number of companies provided a greater level of information which may have been useful.

In order to fulfil the first objective of the thesis, which seeks to uncover the impact of IFRS 7 on FI disclosures provided by Jordanian listed companies, four hypotheses are proposed. First, the current study seeks to investigate whether the introduction of IFRS 7 has led to an

increase in the number of Jordanian listed companies publishing FI-related information. Hence, the first hypothesis is as follows:

H1: The proportion of Jordanian listed companies disclosing FI disclosure has increased significantly following the introduction of IFRS 7.

Second, in order to investigate the impact of IFRS 7 on the level of FI disclosure supplied by Jordanian listed companies, the following hypothesis is advanced:

H2: The level of FI disclosure has increased significantly following the introduction of IFRS 7 compared to information provided previously by Jordanian listed companies.

In to study the impact of IFRS 7 on the FI disclosure provided by the four sectors examined in the current thesis, two hypothesises are developed

H3: There are significant differences in FI disclosures by Jordanian listed companies within and across sectors.

H4: The Comparability of FI disclosure provided by Jordanian listed companies increased within and across sectors after IFRS 7 was implemented.

In addition, previous studies about the impact of mandating FI disclosures have provided empirical evidence that: (i) the level of corporate disclosure has enhanced the market value of the firm (Hassan and Mohd-Saleh, 2010); (ii) a higher level of disclosure matters when valuing companies (Tsalavoutas and Dionysiou, 2013); and (iii) users (mainly investors) are selective in their needs and they look at certain types of information when making decisions (Hassan et al., 2006a; Hassan and Mohd-Saleh, 2010; Song et al., 2010). Indeed, relevance quality has long been considered as one of the fundamental qualitative attributes for accounting information to be considered useful (IASB, 2006; FASB, 2006). Hence, to

achieve the second objective of the current study, three additional hypotheses were developed. First, to examine the value relevance of FI disclosure provided by Jordanian listed companies, the following hypothesis was proposed:

H5: The level of FI disclosure is value relevant and can explain market value.

In order, to investigate whether or not the level of FI disclosure is value relevant, the sixth hypothesis was formulated:

H6: The relative value relevance of FI disclosure is greater for companies exhibiting higher levels of compliance with FI disclosure requirements.

Finally, in order to examine the value relevance of the sub-components of FI disclosure, the sixth hypothesis was proposed:

H7: There is a relationship between the components of FI disclosure and firms' market value.

5.5 The Disclosure Index Method

Corporate disclosure in the annual reports of companies is an area that has generated a great deal of academic interest (e.g. Mautz and May, 1978; Nair and Frank, 1980; Gray et al., 1995; Gray and Roberts, 1989). Marston and Shrives (1991) argued that one research instrument that has been used in numerous publications in order to measure corporate disclosure is the disclosure index; specifically, they stated that:

> "Disclosure index is an extensive list of selected items which may be disclosed in a company report; it can be used to show compliance with accounting regulations and/or to examine the level of voluntary information" (p.195)[127].

[127] Disclosure indices can cover information reported via more than one disclosure vehicle such as corporate annual reports, interim reports, investor relations and financial analysts' reports. However, the main source of corporate disclosure is the annual report (Hassan and Marston, 2010); this information consists of qualitative and quantitative data; quantitative data can be both financial and non-financial. Furthermore, information can be presented in a variety of forms such as illustrations, diagrams and graphical presentations (Marston and Shrives, 1991).

However, Cooke and Wallace (1989) recognised the problem inherent in measuring corporate disclosure; they stated that:

> "Corporate disclosure is an abstract concept that cannot be measured directly; it does not possess inherent characteristics by which one can determine its intensity or quality like the capacity of a car" (p. 51).

Because of this criticism, Beretta and Bozzolan (2008) argued that there is no single measure of corporate disclosure quality that is universally accepted. In the absence of a generally agreed model for corporate disclosure quality and without relevant as well as reliable techniques for measuring quality, prior research has used disclosure quantity as a proxy for disclosure quality assuming that quantity and quality are positively related (Hail, 2002; Beattie et al., 2004). This approach was initially adopted by Botosan (1997) who observed that disclosure quality is a very difficult attribute to assess[128]. In this respect, Beattie et al. (2004) suggested that while several dimensions of disclosure quality can be expected to command reasonably widespread support, a primary dimension of disclosure quality is likely to be the actual amount of disclosure relative to quantity expected given a company's size and complexity[129].

Despite the difficulties, Beretta and Bozzolan (2005) developed a quality index framework which measures both the quantity and the quality of information disclosure in annual reports. The framework consists of two dimensions, namely: the quantity and the richness of information disclosed. Specifically, they argued that:

> "The appreciation of the disclosure offered by a firm requires the adoption of a multidimensional framework that jointly considers not only how much is disclosed (the quantity of disclosure) but also what and how it is disclosed

[128] It should be noted that no definitive set of quality attributes and weightings exist, since quality is subjective and context-dependent (Beattie et al., 2004).
[129] Other dimensions include the spread of disclosures on a topic (Beattie et al., 2004).

> (richness of disclosure). This considers quantity dimension and operationalises the concept of richness for disclosure quality. Richness refers to a function of the coverage of and dispersion among the different topics that qualify a firm's business model (width) and of the insights disclosed on the future performance of the firm (depth)" (p. 342).

In addition, Beretta and Bozzolan (2005) designed measures for both quantity and richness of information disclosure. Adopting Beretta and Bozzolan's (2005) framework, Urquiza et al. (2009) investigated the quality of information disclosure for a sample of Spanish listed non-financial companies over the period between 2000 and 2004. Three indices were developed: *a* multidimensional *quality index*; a *scope index* designed to measure the scope of information and a *quantity index* that measures information disclosed exclusively in terms of quantity. The findings revealed that all the indices were significantly correlated; the highest correlation was between the quality and quantity indices (0.715). However, Urquiza et al. (2009) uncovered differences when companies were ranked according to the values of the three different indices; these different rankings reflected the impact of using a certain index to measure information disclosed by companies[130]. The study concluded that the notion about the irrelevance of a particular disclosure index is invalid and that disclosure quantity can be used as a proxy for disclosure quality – given the high correlation between them.

The current study aims to investigate the impact of IFRS 7 requirements on the usefulness of FI disclosure for Jordanian listed firms. The accounting literature in this area has typically employed a disclosure index approach to assess the extent of corporate disclosure

[130] For instance, Abertis Co. in 2002 came first in the ranking when using the quality index, but it came fourth when the coverage index was used. However, again in 2002, the same company was far from the top in the rankings according to the scope and quantity indices. In 2004, Inditex Co. was at the bottom when using the quality and quantity indices, but it came third for the scope index. Additionally, there were differences in the rankings by year. For example, Abertis Co. led the quality index ranking in 2002 but it was at the bottom in the following years (Urquiza et al., 2009).

in both developed and developing countries; subsequently, conclusions about the usefulness of corporate disclosure have been drawn. The current study adopts a similar view.

5.5.1 Constructing a Disclosure Index

Hassan and Marston (2010) argued that there is a great deal of variation in the literature on the construction of a disclosure index; studies vary in terms of: (i) the degree to which the researcher is involved in constructing the index; (ii) the type of published information examined; and (iii) the number of items of information included in the index. First, the extent of the researcher's participation in constructing a disclosure index ranges from full involvement to no involvement; full involvement means that the researcher is in charge of the whole process of constructing the index from selecting the items of disclosure for inclusion to scoring these items; by contrast, no involvement means that the researcher simply draws on existing indices from extant studies or professional organisations[131] (Marston and Shrives, 1991). For example, a number of studies have employed disclosure indices available from organisations (e.g. CIFAR) to measure the quantity of information provided (e.g. Salter, 1998; Barron et al., 1999; Richardson and Welker, 2001; Hope, 2003a; b; Bushman et al., 2004). Other studies recognise that the involvement of the researcher in constructing a disclosure index varies (i.e. Choi, 1973; Buzby, 1974; 1975; Firth, 1979; Chow and Wong-Boren, 1987; Botosan, 1997). Indeed, Marston and Shrives (1991) pointed out that the use of an existing disclosure index has the advantage that a direct comparison with previous work can be made. However, such pre-prepared indices often suffer from the problem that no two types of information or contexts are identical so

[131] These organisations include: Standard and Poor's Transparency and Disclosure scores, the Securities and Exchange Commission ratings of the Management Discussion and Analysis disclosure, the Centre for International Financial Analysis and Research (CIFAR) and studies by the Big four Accounting Firms.

that modifications to existing indices will usually be necessary. Thus, it was decided to construct a new disclosure index in the current investigation.

Second, the type of information selected can encompass mandatory disclosure (e.g. Ahmad and Nicholls, 1994; Wallace et al., 1994), voluntary disclosure (e.g. Chow and Wong-Boren, 1987; Botosan, 1997; Depoers, 2000; Meek et al., 1995) and/or both (i.e. Singhvi and Desai, 1971; Buzby, 1975; Cooke, 1992; Inchausti, 1997; Marston and Robson, 1997; Naser and Nuseibeh, 2003; Hassan et al., 2009). The selection of items for inclusion in the index is an important decision when constructing a disclosure index; practical issues often dictate that a selection of items should be included to meet the needs of a specific group of users (Marston and Shrives, 1991). In this regard, Beattie et al. (2004) argued that to measure the extent of any disclosure, the selection of items involves the explicit or implicit specification of a user group. Finally, the number of items of information included in the disclosure index in previous studies varies from a few items (e.g. Tai, 1990) to hundreds of items (e.g. Spero, 1979). The size of the index often varies depending upon the type of disclosure being studied and the category of information being examined.

In terms of the current study, the disclosure index was constructed by the researcher; the disclosure checklist was identified based on the text of the three standards employed (IFRS 7, IAS 32, IAS 30) to ensure that the index encompassed all of the requirements in these pronouncements. In addition, the study consulted the Big four accounting firms' checklists of these standards (Deloitte Touche, KPMG, Ernst and Young, PricewaterhouseCoopers) as well as the extant literature on FI disclosure to ensure that the checklist was comprehensive (e.g. Bischof, 2009; Bamber and McMeeking, 2010). Thus, the number of items included in

the current study's index was determined by the standards themselves and subsequently assessed by the researcher.

A number of steps were followed when constructing the disclosure index in this study to ensure that the index encapsulates all FI information included in the annual reports of the Jordanian listed companies. To that end, a pilot study of 8 firms was undertaken for both 2006 and 2007 years (16 annual reports). As part of this pilot study, all the annual reports for each company were read twice to ensure that the disclosure checklist included all relevant information[132]. The resulting checklist included 53 items spread across 7 categories of information. This reading of the whole document was necessitated by the requirements of IFRS 7 which considers the notes within the annual report as the main vehicle for providing FI-related information. The findings of the pilot study revealed that the disclosure index was an appropriate vehicle to pick up the relevant FI information provided by the sampled firms. Prior to the analysis stage, the student and his supervisors[133] applied the disclosure index to the annual reports of a number of companies and differences were noted and reconciled[134]. Discussions between the research student and his supervisors were essential for categorising FI disclosure where an overlap between categories was found. When agreement between the coders was reached, the main disclosure index investigation began. All of the 164 annual reports (82 pre- and 82 post-IFRS 7) were then coded according to the detailed steps devised in the pre-analysis stage. For each annual report, the amount of FI disclosure devoted to all categories and its location in the financial

[132] There was a three-week time gap between the two readings.

[133] Two annual reports in English were reviewed by the student and his supervisors. However, the vast majority of the Jordanian listed companies' annual reports are written in the Arabic language. Nevertheless, the reports reviewed were useful; they were from different industries, varied in size and disclosed FI information in different locations.

[134] For example, some items were overlapping and included under more than one category which entailed relocating some items. In addition, some differences were noted about information location in the annual reports; for instance, information about qualitative risk information was found in different parts of the annual report although it was supposed to be in the risk management discussion.

statements was noted on a specially-designed record sheet (Appendix 5.1). The content of the record sheets (in Microsoft Word format) were then transferred to an Excel spreadsheet in order to permit subsequent analysis and to facilitate statistical testing; this analysis was undertaken using SPSS software. In addition to FI information, other information relating to firm characteristics (such as industry, size, accounting firm, leverage and profitability) for all companies was collected and included in the Excel spreadsheet of each company. Figure 5.3 shows the disclosure checklist for the current study which was constructed based on the disclosure requirements of IFRS 7; IFRS 7 included all of the disclosures specified in IAS 32 and IAS 30 as well as new requirements. An inspection of this checklist reveals that the aggregate number of the checklist items is 53; this number comprises 40 items from the requirements of IAS 30/32 before IFRS 7 was introduced and 13 new items from the requirements of IFRS 7. An analysis of the contents of this checklist illustrates that FI disclosure can be divided into seven categories namely: (i) accounting policies for each class of FIs (4 items); (ii) balance sheet disclosures about FI (7 items); (iii) income statement disclosures about FI (6 items); (iv) hedge (including cash flow hedge) disclosure about FI (9 items); (v) fair value disclosures about FI (6 items); (vi) risk disclosures associated with FI usage (14 items); and (vii) other disclosures about FI (7 items). A visual inspection of Table 5.3 reveals that the risk disclosures associated with FI usage were split into two groups: qualitative and quantitative risk disclosures. The quantitative risk disclosures were further disaggregated into disclosures about credit risk, market risk and liquidity risk. These categories are based on the requirements of IFRS 7. Of these 13 new items added by IFRS 7, 9 items belonged to risk disclosure associated with FI.

Figure 5.3: Disclosure Index

FI Disclosure Requirements Based on IFRS 7			
No.	**Categories/Items**	**No.**	
	(i) Accounting Policies	27	Measurement methods
1	The nature of FIs	28	Information if FV cannot be measured
2	Terms and conditions for FI designation	29	Fair values for each class of FI
3	Recognition and measurement of FI	30	Changes in FV of FI
4	Terms and conditions of impairment about FI	31	Comparable carrying amounts*
	(ii) Balance Sheet Disclosure about FI	32	Amount recognised/removed in/from equity
5	FI at fair value (FV) through profit or loss - held for trading		**(x) Other Disclosures about FI**
6	FI at FV through profit or loss – designated	33	Information on Reclassification
7	Held-to-maturity investments	34	Information on Derecognition
8	Available-for-sale financial assets	35	FI pledged as Collateral
9	Loans and receivables	36	Allowances account for credit losses
10	Financial liabilities measured at amortised cost		Compound FI
11	The carrying amounts of each class of FI*	37	Defaults and Breaches
	(iii) Income Statement Disclosures about FI	38	FI that either past due or impaired*
12	Net gains/losses by classes of FI	39	**(vi) Qualitative Risk**
13	Interest income associated with FI	40	How the risks arise*
14	Interest expense associated with FI		Objectives, policies and processes for managing the risks*
15	Fee income associated with FI	41	Methods used to measure the risk*
16	Interest income on impaired FI	42	Changes (in last three items) from previous period*
17	Impairment losses associated with FI	43	**(vii) Quantitative Risk : Credit Risk**
	(iv) Hedge Disclosures about FI	44	Maximum exposure to credit risk
18	Description of each type of hedge associated with FI		Concentration of credit risk
19	FI designated as hedging instruments and their FV	45	Credit quality of FI that are neither past due nor impaired*
20	Nature of risks being hedged associated with FI	46	Collateral held as security and other credit enhancements*
21	Recognised gains/losses on hedge ineffectiveness associated with FI*		**(viii) Quantitative Risk: Market Risk**
22	For FV hedge: gains or losses on hedging instruments	47	Maximum exposure to Market risk
	(v) Information on Cash Flow Hedge (CFH)	48	Concentration of Market risk
23	Gains or losses on CFH associated with FIs	49	Maturity dates
24	Period when CFH are expected to occur and affect profit or loss	50	Sensitivity analysis of market risk*
25	Forecast transaction for which hedge can be used	51	**(ix) Liquidity Risk**
26	Amount recognised/removed in/from equity during the period	52	Maximum exposure to liquidity risk*
	(vi) Fair Value Disclosure about FI	53	Maturity analysis*

Notes: In Figure 5.3, * indicates those items that were required for the first time under IFRS 7, whereas the absence of an * indicates that an item had been required under IAS 30/32.

5.5.2 Weighting the Disclosure Index

The unit of measurement for the disclosure index is a vital decision which must be taken; specifically, there are four distinct levels of measurement which can be used: nominal, ordinal, interval, and ratio measures[135] (Marston and Shrives, 1991). Hassan and Marston (2010) argued that a disclosure index can based on ordinal measurements but whether it can analyse interval measurements is less clear. Indeed, the level of measurement fundamentally affects the permissible operations which may be carried out on the index scores (Siegel, 1956). For example, nominal and ordinal levels are categorical in nature, while interval and ratio levels are continuous data. Hence, the type of tests that can be carried out is affected by such categorisation.

Irrespective of which level of measurement is appropriate, the decision about whether to use a weighted or un-weighted index needs to be considered separately (Marston and Shrives, 1991)[136]. Indeed, both weighted (Cerf, 1961; Buzby, 1974; 1975; Malone et al., 1993) and un-weighted indices (Raffournier, 1995; Owusu-Anash, 1998; Haniffa and Cooke, 2002) have been used in the extant literature to assess the extent of corporate disclosure. The un-weighted index assumes that each item of disclosure is equally important (Hossain et al., 1995); dichotomous scores are used where a value of 1 is given if the item is disclosed and 0 if the item is not provided (Cooke, 1992). On the other hand, the weighted index is typically based on the users' perceptions about the importance of

[135] These four measurement scales are used in order to facilitate the statistical procedures; information can take any of these scales in accordance with its mathematical properties (Gaito, 1980). A nominal variable is for mutually exclusive, but not ordered, categories. An ordinal variable is one where the order matters but not the difference between values. An interval variable is a measurement where the difference between two values is meaningful. A ratio variable, has all the properties of an interval variable, and also has a clear definition of 0 (Velleman and Wilkinson, 1993).

[136] The use of weightings in the disclosure index appears to be an attempt to achieve measurement on the level of an interval scale. According to this, appropriate statistics can be employed; parametric statistical tests are only appropriate when measurement on an interval or ratio scale has been achieved and the population is normally distributed, while non-parametric statistical tests should be used when nominal or ordinal measurement scales have been implemented (Siegel, 1956).

different disclosure items (Naser and Nuseibeh, 2003). Indeed, weightings are typically arrived at by conducting attitude surveys among relevant user groups asking them about the importance of each item (Beattie et al., 2004). However, a weighted index suffers from a number of limitations. For example, assigning weights introduces a degree of subjectivity because the level of usefulness assigned to each item of information may vary from one user to another; it will depend on the country, the user grouping, the industry and the time of the study (Firth, 1979; Hassan and Marston, 2010). In addition, weightings may not represent the real economic consequences to the subjects whose opinions are pooled since they are typically ascertained in an artificial setting i.e. by posing scenarios (Chow and Wong-Boren, 1987). Finally, weightings may not reflect stable perceptions of similar disclosure items across subjects over time (Dhaliwal, 1980). Specifically, Wallace (1988) underscored the problem of consensus within user groups when ascertaining perceptions about the importance of disclosure items, and questioned the assumption that the perceptions of users can be elicited by investigation. In this regard, Benson and Escobar (2002) stated that "to avoid the arbitrariness inherent in this process the un-weighted index should be used" (p. 35)[137].

Given the limitations of the weighted index, Aly et al. (2010) noted that a majority of studies in this field have used an un-weighted disclosure index. Based upon this evidence, the current study adopts the un-weighted disclosure index. In addition, an un-weighted index was chosen because the study does not focus on a single user group; trying to ascertain and average the weighting from different user groups would have been difficult. Indeed, Cooke (1989) has argued that un-weighted indices are more suitable research instruments in corporate disclosure studies when the research is focused on all groups who

[137] However, this may not be a serious problem since prior studies have found that the weighted and un-weighted scores tend to give the same results (Cooke, 1989; Marston and Shrives, 1991; Beattie et al., 2004).

use a company's annual report rather than the requirements of any specific user category. In particular, the current study targets FI disclosures required by IAS/IFRS based on the needs of investors, creditors and other groups (IASB, 2006).

In general, a disclosure index suffers from the problem that certain items of information may not be applicable to a particular company; companies should not be penalised for non-disclosure in this case (Marston and Shrives, 1991). This problem can be avoided by ensuring that all disclosure items are relevant to all companies in the sample (Buzby, 1974). If this does not apply, index scores need to be adjusted by changing the denominator to the maximum score possible for that company (Cooke, 1989). Thus, any item that was not applicable for a company was given an NA score.

5.5.3 Reliability and Validity of the Disclosure Index

Clear instructions are important in order to construct a reliable and valid index (Marston and Shrives, 1991). However, Beattie et al. (2004) argued that many studies fail to explicitly consider reliability and validity issues when determining their disclosure index scoring method[138]. Marston and Shrives (1991) stated that one measure of reliability is concerned with whether the findings of the research can be replicated by other researchers; it considers whether the measurement instrument can reproduce consistent results on repeated measurements[139]. Indeed, Cooke (1989) argued that the disclosure instrument should be reliable because the information measured by the index is derived from the same annual reports. Accordingly, measures of corporate disclosure that are subject to judgment

[138] Reviewing 50 studies in the field of corporate disclosure, Hassan and Marston (2010) found that just 16 studies indicated that they had performed a test of reliability for their disclosure indices.

[139]for instance, with respect to a disclosure index, firms with the highest disclosure scores on a first measurement trial using a disclosure index will tend to be among the firms with the highest disclosure scores on repeated trials using the same disclosure index; the same will be true for the entire sample of firms whose disclosure level is being measured via the same disclosure index (Hassan and Marston, 2010).

in their construction and coder error should be tested for reliability in order to draw useful inferences when they are employed in research.

The extant literature has suggested four types of reliability test: (i) test-retest; (ii) inter-coder reliability; (iii) stability; and (iii) internal consistency (Hassan and Marston, 2010). The test-retest approach measures the stability of the results obtained from a measurement tool over time; it is more relevant for manual content analysis (Weber, 1990)[140]. Inter-coder reliability refers to the extent to which similar findings are produced when the same text is coded by more than one coder (Weber, 1990). The higher the correlation coefficient obtained, the higher the reliability of the measurement tool (Hackston and Milne, 1996)[141]. Finally, Litwin (1995) proposed an internal consistency test as "an indicator of how well the different items measure the same issue" (p. 21). The most common measure of internal consistency is Cronbach's Alpha[142] which calculates the inter-item correlation (Carmines and Zeller, 1991); it reflects the homogeneity among a number of items grouped together to form a particular scale and shows how well the different items complement each other in their measurement of different aspects of the same variable (Litwin, 1995). It takes a value of between zero and one; it takes the maximum value of one when the correlation between each pair of items is strong. Thus, the higher the coefficient alpha obtained, the higher the reliability of the scale (Hassan and Marston, 2010). In order to increase the reliability of the disclosure index, the current study performed this test for both the items and the categories

[140] The test-retest method suffers from some setbacks. For example, Weber (1990, p.17) stated that: 'inconsistencies in coding constitute unreliability. These inconsistencies may stem from a variety of factors, including ambiguities in the coding rules, ambiguities in the text, cognitive changes within the coder, or simple errors, such as recording the wrong numeric code for a category. Because only one person is coding, stability is the weakest form of reliability'.

[141] Hackston and Milne (1996) performed three rounds of re-testing to compare the judgments of three coders as to what constituted a corporate social disclosure sentence to assess the reliability of their measure of disclosure level.

[142] Cronbach's Alpha is an estimate of the expected correlation between one test and a hypothetical alternative form containing the same number of items; (Litwin, 1995).

included in the index. Table 5.1 shows the results of this reliability test; it indicates that the coefficient for Cronbach's alpha is 0.80 (pre-IFRS 7) and 0.89 (post-IFRS 7) with the disclosure items, and 0.75 (pre-IFRS 7) and 0.78 (post-IFRS 7) with the disclosure categories. This result is consistent with the findings of Botosan (1997) and Hassan et al. (2006) who employed the same test to measure the internal consistency of their measures of disclosure; while Botosan (1997) documented a coefficient of 0.64, Hassan et al's. (2009) coefficient was 0.80. Hence, the results suggest that there is a high level of internal consistency (reliability) in the disclosure index as a measure of FI information provided by Jordanian listed companies in the current research.

Table 5.1: Reliability Tests

	Aggregate FI Disclosure pre-IFRS 7	Aggregate FI Disclosure post-IFRS 7	FI disclosure categories pre-IFRS 7	FI disclosure categories post-IFRS 7
Number of cases	82	82	82	82
Number of items	40	53	7	7
Cronbach's Alpha	0.80	0.89	0.75	0.78

Note: This table presents the result of an internal consistency test (reliability) for the disclosure index in the current study.

With a disclosure index, the term *validity* refers to the extent to which any measuring instrument quantifies what it is intending to measure (Marston and Shrives, 1991). Three common types of validity test are: (i) criterion validity; (ii) content validity; and (iii) construct validity (Hassan and Marston, 2010). Criterion validity is a measure of how well one instrument compares with another index or predictor; it evaluates whether there is a significant association between the disclosure index and an external criterion[143] (Litwin,

[143] There are two types of criterion validity: concurrent validity and predictive validity. The difference between them is the time horizon; the concurrent validity concerns the correlation between a measure and the

1995); the higher the correlation coefficient, the more valid the instrument. Botosan (1997) measured the correlation between her self-constructed disclosure index items and each of the AIMR scores. However, this type of test tends not to be used when assessing the validity of social science indices; this is because most social science measures represent theoretical concepts for which there are no known criteria against which the variables should be compared (Carmines and Zeller, 1991). Content validity is evaluated by seeking the subjective judgment of non-experts and/or professionals; hence, some refer to it as face validity because it depends on how well the instrument measures what it intends to measure (Hassan and Marston, 2010). This type of validity is often seen as insufficient for drawing inferences; this is because of concerns about users' perceptions regarding their own use of information (Dhaliwal, 1980). However, it has been employed by a number of studies to examine the validity of a disclosure index (Hail, 2002; Kelton and Yang, 2008).

Finally, a construct validity test examines the extent to which a disclosure index performs in accordance with theoretical expectations (Carmines and Zeller, 1991); using construct validity to test a disclosure index's results compared with the pattern of findings from prior studies (Hassan and Marston, 2010).

The extant literature has investigated the relationship between a measure of disclosure quantity and a number of firm characteristics namely: firm size, industry, listing status, profitability and others (i.e. Choi, 1973; Buzby, 1975; Firth, 1979; Chow and Wong-Boren, 1987; Wallace et al., 1994; Ahmed and Nicholls, 1994; Meek, et al., 1995; Inchausti, 1997; Depoers, 2000; Abd-Elsalam and Weetman, 2003; Ali et al., 2004).

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criterion at the same time, whereas the predictive validity concerns the correlation between a future criterion and the relevant measure (Hassan and Marston, 2010).

However, the findings are mixed; while firm size and listing status had significantly positive relationships with disclosure quantity among prior studies, findings for other variables were less consistent with the relationship being positive, negative or non-existent[144]. Indeed, Hassan and Marston (2010) have argued that these mixed findings are due to problems of construct validity in the disclosure index; they might also relate to problems with model specification and the proxies used for the determinants of disclosure. Conducting a meta-analysis of 50 disclosure index studies, Hassan and Marston (2010) documented that only 23 investigations had undertaken a construct validity test. Specifically, they found that some studies explicitly examined whether the disclosure proxy had been validly constructed (Botosan, 1997; Hail, 2002; Brown et al., 2004), while other studies tested validity implicitly by regressing one or more determinants of disclosure such as firm size and industry on the disclosure quantity (Welker, 1995; Lang and Lundholm, 1996).

In order to enhance the validity of the current study's disclosure index, a construct validity test was performed by examining the correlation between the percentage of the overall FI disclosure and a number of firm characteristics, namely: firm size, industry, auditor, profitability and leverage[145]. Firm size was measured by market capitalisation, profitability

[144] Ahmed and Courtis (1999) used a meta-analysis to examine the results of 29 disclosure index studies that investigated determinants of disclosure in order to identify factors that influenced the results. They found that: (i) the relationship between disclosure levels and corporate size, listing status and leverage were significant and positive; and (ii) there was no significant association between aggregate disclosure levels and corporate profitability and size of audit firm. Importantly, they documented that differences in results were primarily due to sampling error, differences in disclosure index construction, differences in definition of the explanatory variables, and differences in research settings.

[145] The selection of firm size, industry, auditor, profitability and leverage was based on their general inclusion in corporate disclosure studies (Omar and Simon, 2011). In addition, characteristics chosen in the current study have been commonly found to be significantly associated with corporate disclosure. Other factors such as liquidity, dividends, risk, growth and corporate governance might have an impact on disclosure practices, however, they have only been employed in relatively few studies and the sign or significance of their relationship is not always consistent. Hence, a decision was taken in the current study to employ only those characteristics that have been frequently used in the prior literature in order to facilitate a greater level of comparison.

was measured by net profit, the auditor variable considered whether the auditor is from a big four firm or not[146], firm industry was a variable that varied according to the industrial sector in which a Jordanian listed company was located (banking, financial services, service and manufacturing companies) and leverage was measured by the ratio of total debt to total assets[147]. Table 5.2 reports the results of the correlation between FI disclosure and these firm characteristics. An analysis of this table reveals that the findings are in line with prior research; it shows a positive and significant correlation between the level of FI disclosure and firm size (0.816 and 0.723), profitability (0.686 and 0.581) and the auditor variable employed (0.584 and 0.667); but there was a negative association between the quantity of FI disclosure and industry (-0.447 and -0.459) as well as leverage (0.074 and -0.055) for the two years respectively. This suggests that the disclosure index employed in the current study is validly constructed.

[146] Francis and Wang (2008) contended that the Big 4 audit firms play an important role in enforcing the application of proper accounting polices. There is evidence that earnings of US companies with Big four auditors are of higher quality and that the stock market values earnings surprises of Big four clients more highly than earnings surprises of firms with non-Big four auditors (Teoh and Wong 1993; Krishnan 2003). Following a similar line of reasoning, the current study proposes that Jordanian listed firms audited by the Big Four have a higher quality of FI disclosures than those audited by non-Big Four firms.

[147] Expectations about the signs of the relationships between the firm characteristics and FI disclosure were based in the extant literature. For example, in a review of previous findings about the relationship between firm characteristics and disclosure, Inchausti (1997) found that firm size, the choice of Big-Four auditing firm and profitability had a positive and significant relationship with the level of corporate disclosure. On the other, he indicated that leverage and industry showed no consistent relationship with corporate disclosure across the previous studies investigated; they were found to have positive or negative association with corporate disclosure depending on the study considered. In this regard, the results of the current thesis provide a great deal of consistency with the extant literature where a positive and significant relation between FI disclosure and each of firm size, profitability and the choice of audit firm, while a negative relationship is expected between FI disclosure and each of industry and leverage.

Table 5.2: The Correlation Test Between FI Disclosure and Firm Characteristics

	Size	Profitability	Auditor	Industry	Leverage
Panel A: Correlation Test					
Overall FI disclosure pre-IFRS 7					
Correlation Coefficient	0.816	0.686	0.584	-0.447	0.074
p-value	0.000*	0.000*	0.000*	0.000*	0.509
N	82	82	82	82	82
Overall FI disclosure post-IFRS 7					
Correlation Coefficient	0.723	0.581	0.667	-0.459	-0.055
p-value	0.000*	0.000*	0.000*	0.000*	0.627
N	82	82	82	82	82

Notes: *: Correlation is significant at the 0.01 level (two-Tailed), Firm size was measured by market capitalisation, profitability was measured by net profit, auditor reflects whether the auditor is from the Big Four or not; 27 companies from sample were audited by the Big Four accounting firms, while 55 firms were examined by other national accounting firms, firm industry was variable that varied according to the industrial sectors of Jordanian listed companies: banking, financial services, service and manufacturing companies and leverage was measured by total debt to total assets.

In addition to performing these tests of reliability and validity, the process of constructing the disclosure index, as discussed earlier in this chapter, included additional decisions which were aimed at increasing its reliability and validity. The researcher and one of his supervisors shared the process of constructing, coding and testing the items included in the checklist; this resulted in agreement about the final version of the checklist (see Figure 5.3) In addition, the subjectivity problem associated with a weighted disclosure index was avoided by employing an un-weighted index. Finally, firms were not penalised because inapplicable items were unpublished since the disclosure index denominator was adjusted to only include the numbers of relevant items that a firm might have been expected to publish. Indeed, all items were checked to see if they were applicable or not (NA) based on a firm's operations. For example, 7 companies had on average 4 NAs in the *hedge disclosure* category because such type of information was not part of their operational activities. A further 10 companies had on average 2 NAs in the *other disclosure* category.

5.5.4 The Sample for the Study

Annual reports are considered to be the most essential source of news for users of financial information when making their economic decisions (Hossain et al., 1994; Al-Mulhem, 1997; Abd-Eslam, 1999; Omar, 2007). With respect to Jordan, Suwaidan (1997) suggested that because of the scarcity of other sources of financial news, annual reports are the main source of information available to investors. Indeed, Abu-Nassar and Rutherford (1996) examined the importance of financial information sources in Jordan from various users' perspectives (including individual and institutional investors, stock brokers, bankers and academics) and found that the vast majority of user groups considered the annual report as the key source of information which informed their decision-making. Not surprisingly, therefore, most studies in the financial reporting area have employed annual reports as the main source of data for their investigations. The current study is no different in this respect. Thus, annual reports represent the main source of data used in the current study. The overall aim of this thesis is: (i) to examine the impact of the expanded disclosure in annual reports mandated by IFRS 7 against the requirements of former standards about FI information; and (ii) to investigate its value relevance for Jordanian listed companies. Specifically, the study examines FI disclosure pre- and post- the implementation of IFRS 7 which became effective from January 2007. Therefore, the 2006 and 2007 annual reports of Jordanian listed firms are examined; the study investigates the 2006 annual reports prepared under IAS 30 and IAS 32 as compared to the 2007 annual reports prepared under IFRS 7. As pointed out in Chapter 2 (Section 2.3), Jordanian listed firms have been legally obliged to apply IAS/IFRS since 1997 in accordance with the Temporary Securities Act and the Company Act of that year. According to this Act, firms should publish their annual

reports in accordance with IAS/IFRS within three months following the end of their fiscal year[148].

According to the Amman Stock Exchange (ASE), the number of listed companies in 2006 was 227; Table 5.3 provides a breakdown of these firms by market and sector. An inspection of this table shows that securities in the ASE are divided into two main divisions: the first market and the second market. Any public shareholding company can be listed on the ASE if it meets the listing requirements; initially, a company must list on the second market[149] and if it satisfies certain conditions about size, trading activity and performance it can then be transferred to the first market[150]. In addition, the table reveals that Jordanian listed companies consist of three main industrial sectors: financial (including banks, financial services and insurance firms), services and manufacturing. The financial sector dominates the market since it accounts for over 38% of listed companies. This is followed by the manufacturing sector (33%) while the services sector is third (29%)[151].

[148] The fiscal year for all Jordanian listed firms starts on 1st January and ends on 31st December (Companies Act, 1997).

[149] The company will be listed on the second market if it meets the following conditions: (i) the relevant securities are registered with the JSC; (ii) the relevant securities are deposited with the Securities Depositary Center; (iii) there are no restrictions on the transfer of ownership of relevant securities; (iv) there is an audit committee at the issuer, in the sense used in the Securities Law in force; and (v) the issuer has signed the the listing agreement with the ASE, which determines the rights and obligations of the two parties in relation to listing of securities (Securities Act No. 76 of 2002).

[150] According to the Securities Act No. 76 of 2002, the company will be transferred to the first market if it meets the following conditions: (i) it should be listed for at least one full year on the Second Market; (ii) the company's net shareholders' equity must not be less than 100% of the paid-up capital; (iii) the company must make net pre-tax profits for at least two fiscal years out of the last three years preceding the transfer of listing; (iv) the company's free float to the subscribed shares ratio by the end of its fiscal year must not be less than 5% if its paid-up capital is 50 million Jordanian Dinars or more and 10% if its paid-up capital is less than 50 million Jordanian Dinars; (vi) the number of company shareholders must not be less than 100 by the end of its fiscal year; (vii) the minimum days of trading in the company shares must not be less than 20% of overall trading days over the last 12 months; and (viii) at least 10% of the free float shares must have been traded during the same period.

[151] For more information about the ASE and its performance see Section 2.4 of Chapter 2

Table 5.3: The Population of the Study

COMPANY SECTOR	FIRST MARKET	%	SECOND MARKET	%	TOTAL	%
Financial industry:	46	49	41	31	87	38
Banks	12	13	3	2	15	7
Financial services	27	28	17	13	44	19
Insurance	7	7	21	16	28	12
Services industry	21	23	44	33	65	29
Manufacturing	28	29	47	36	75	33
Total	95	100	132	100	227	100

Note: This table presents the population of the current study including Jordanian Listed firms by industrial sector.

Unlike prior studies on FI disclosure which have focused on financial companies (Barth, 1994; Barth et al., 1996; Eccher et al., 1996), the current investigation examines financial and non-financial firms listed on the emerging capital market of Jordan. However, some companies had to be excluded from the analysis. First, the study excluded companies listed on the second market (132 firms) because the second market in Jordan represents firms whose shares are not actively traded in the ASE and the volume of transactions in these securities is quite small (ASE, 2007); this means that the demand for corporate information about such firms is low; thus, they disclosed relatively little information. Nevertheless, a pilot study examined a sample of 10 companies from the second market (20 annual reports) and found that: (i) their annual reports were incomplete and FI disclosure in their financial statements was limited to simple FIs (e.g., loans, receivables, payables); and (ii) no disclosures were provided about hedge and risk activities associated with FI as IFRS 7 requires; for example, a detailed reading of the annual report for one firm revealed that "their activities are locally limited, so they are not exposed to any kind of risks, hence, they do not need hedge and risk instruments" (Annual Reports of ALFA Co., 2007;). By

excluding those companies from the sample, the possible bias from including such companies which might publish little or no information in their annual reports is avoided. It is considered that the bias from excluding firms with low quantities of FI disclosure is low because prior studies have found that company size can have a significant impact on the extent to which financial information is disclosed (Rennie and Emmanuel, 1992; Ettredge et al., 2006; Tsakumis et al., 2006; Talha et al., 2006; Suwaidan et al., 2007). These investigations have documented that large companies disclose more financial information than their small and medium-sized counterparts. Finally, the requirements of IAS/IFRS in terms of FI disclosure are based on the significance of FI to a firm's financial position and performance. It was felt that FI may be of less relevance to smaller firms which may not use FI.

Second, the study excludes insurance companies from the first market (7 companies) because they comply with special regulations which are issued by the Jordanian Insurance Commission. Indeed, Article 3 of the Insurance Regulatory Act No. 33 of 1999 states that: "Insurance companies shall not publish any financial statements until they are approved by the Commission". Specifically, insurance firms should not apply any new accounting standards before getting permission from the Commission (Article 3). In addition, Article 4 of this Act states that "The provisions of the regulation and instruction issued by the Commission shall be applied in case of a conflict with the International Accounting Standards". Nevertheless, the study reviewed all the 2007 annual reports of the insurance companies and found that although IFRS 7 became effective in 2007, many were still applying IAS 32. For example, one company stated that "The company still applies IAS 32 until the Insurance Commission allows us to apply the new pronouncements (IFRS 7)" (Jordan Insurance Company, Annual Reports, 2007, p. 17).

Table 5.4: Final Sample of the Study

	FIRST MARKET	%
Overall population	227	100
Less:		
Second market	(132)	58
Incomplete data	(2)	1
No data available	(4)	2
Insurance: excluded	(7)	3.0
Final sample	82	36

Notes: This table presents a breakdown of the final sample of the current study.

Third, the study excluded six further companies from the first market; for two of these, their statements were incomplete while for the remaining four statements were not available. Thus, the final sample of the current study encompassed 82 firms; Table 5.4 describes the final sample of the study in detail. This sample represented 86% of companies listed on the first market (82 out of 95). These companies were distributed as follows: 12 banks, 26 financial service firms, 18 service firms and 26 manufacturing firms.

5.5.5 Measurement of Financial Instruments Disclosure

Estimating FI disclosure level provided by Jordanian listed companies pre- and post- the implementation of IFRS 7 represents the first primary objective of the current study. This variable is measured by constructing a disclosure index based on the requirements of the accounting standards employed in this study. According to this approach, the level of FI disclosure (FID) is measured using the following equation:

$$FID_j = \sum_{i=1}^{n} L_i \qquad \textbf{[5.1]}$$

where L is one if the item i is disclosed and zero if the item i is not disclosed; n is the number of items which has an upper limit of 53 in the current study. Companies are not

penalised for not disclosing information about inapplicable items; hence, the percentage of overall FI disclosure level (POFID) is measured as follows:

$$POFID_j = \sum_{i=1}^{n} L_i \Big/ N_i \qquad \textbf{[5.2]}$$

where N_i equals total applicable items for company j.

5.6 Value Relevance Model

Barth (2000) argued that investors represent a large class of financial statement users; thus, much academic research emphasising financial reporting adopts an investor perspective. Specifically, she stated that:

> "Studies often use a valuation approach to address financial reporting questions because investors are primarily interested in information that can help them assess the value of the firm. Therefore, valuation is a key input into, and an important output of, investors' decisions" (p. 10).

Indeed, a significant body of academic accounting literature relates to valuation models and provides researchers with a solid base upon which to build their research design (e.g. Beaver, 1968; Barron, 1995; Ohlson, 1995; Barth et al., 1996). Investigations in this line of research are called *value relevance* studies (Barth et al., 2001). Certainly, value relevance research has a long pedigree (Miller and Modigliani, 1966). However, it has become a major area of empirical research from the 1990s (Beaver, 2002). For example, Holthausen and Watts (2001) identified 54 value relevance studies in the literature by 2000, but only three of which were published before 1990. Beaver (2002) argued that value relevance research has two main characteristics: (i) it entails an in-depth knowledge of accounting institutions, accounting standards and the specific features of the reported numbers; and (ii) timeliness of information is not an over-riding issue; although value relevance studies

encompass event studies, they also include studies that examine the relationship between the levels of share prices and accounting information.

The main aim of value relevance research is to relate accounting information to a measure of firm value in order to evaluate the characteristics of the accounting information and its relationship to firm value (Barth, 2000). Specifically, Beaver (2002) pointed out that value relevance research examines the association between a security price-based dependent variable and a set of accounting variables (e.g. book value of equity, earnings, other accounting information). Indeed, the value relevance of accounting information is one of the basic attributes of accounting quality (Francis et al., 2004). Specifically, Francis and Schipper (1999) argued that it measures the ability of financial statement information to capture the information that influences security prices.

In fact, the value relevance of accounting information has been widely studied in both developed markets (Collins et al., 1997; Francis and Schipper, 1999; Lev and Zarowin, 1999) and, to a lesser extent, in emerging markets (Hellstrom, 2006; Hassan et al., 2009; Hassan and Mohd-Saleh, 2010). The findings of the extant literature in this area have revealed that cross-country differences in disclosure and measurement causes cross-country differences in the value relevance of accounting information (Alford et al., 1993; Amir et al., 1993; Harris et al., 1994; Ali and Hwang, 1999). For example, Ali and Hwang (1999) examined the value relevance of accounting information across 16 countries including developed and developing markets; the findings revealed that while accounting information appeared to be value relevant in countries with different orientations, value relevance was lower in countries with bank-oriented economies compared to their counterparts in market-oriented finance systems. Using a similar line of argument, the current study aims to

investigate the value relevance of FI disclosure to determine whether such disclosures are associated with share prices and, hence, affect investors' investment decisions.

According to Barth (2000), when designing valuation-based research a measure of value is required. In this regard, Beaver (2002) argued that much of the regulation of financial reporting is premised on the notion that once firms make accounting information publicly available, the implications of this news will be understood by investors and reflected in security prices, if the market is efficient. However, Barth (2000, p. 11) argued that even if the market is not totally efficient in processing the valuation implications of all publicly available information, share prices reflect the consensus beliefs of investors; therefore, share prices should be studied. As a result, share prices have become the most common value measure used in financial reporting research. Accordingly, accounting information is termed *value relevant* if it is significantly related to the dependent variable – share price (Beaver, 1998). This is one of the distinguishing features of value relevance studies which is different from event studies where the dependent variable is typically a measure of abnormal returns (Strong, 1992).

The second component of a valuation-based research design is a valuation model linking firm value to firm-specific characteristics that investors are assumed to value (Barth, 2000); this is the key to making a link between firm value and accounting information (Ohlson, 1995). A variety of valuation models have been developed over the last century (Barth et al., 2001; Holthausen and Watts, 2001). The most commonly employed valuation model is the dividend discount model which is based on accounting earnings (Beaver, 2002). Indeed, Ball and Brown (1968) and Beaver (1968) provided the seminal work linking accounting earnings to share prices; some researchers made this link explicit (e.g., Beaver, et al.,

1989), but often it was implicit (e.g. Beaver et al., 1980). This model was employed more by finance researchers and economists who were interested in aspects of the pricing process rather than the accounting numbers (Barth, 2000). An alternative model which expresses the market value of equity as a function of the value of the firm's entire assets and liabilities has also been employed (Landsman, 1986; Barth, 1991); it views the accounting earnings as a proxy for permanent earnings. However, Barth and Landsman (1995) have argued that assets and liabilities in a balance sheet do not reflect the values of all future benefits and obligations which a firm may expect; for example, it does not include potential synergies and other intangibles that are reflected in firm value.

Ohlson (1995) developed an accounting-based model which encompasses both earnings (x) and the book value of equity (y) as the variables of interest. Indeed, Barth (2000) suggested that the Ohlson (1995) model provides a direct link between accounting amounts and firm value; this feature of the model has helped it to become the most pervasive valuation approach in accounting research over recent years. In addition to providing a direct link between accounting amounts and firm value, it has a number of other advantages. First, it specifies how to estimate firm value from accounting amounts rather than relying on market prices - as in much of the extant valuation research (Hellstrom, 2006). In this regard, Barth and Clinch (1998) argued that the model provides an alternative value benchmark for valuation-based accounting research. In particular, Beaver (2002) stated that:

> "The assumptions include a valuation aspect that the value of equity is equal to the present value of expected future dividends, the clean surplus relation and some form of linear information dynamic. Ohlson (1995) model has derived a rich set of implications from these parsimonious assumptions"(p. 457).

Second, prior research has suggested that the market may not be completely efficient (Bernard and Thomas, 1989) because price and value can differ (Frankel and Lee, 1998). The Ohlson model, however, permits researchers to specify tests relating to perceived mispricing; it allows the market price to differ from fundamental value because of information asymmetry and other effects (Barth, 1991). Specifically, Barth et al. (2001) stated that:

> "The Ohlson (1995) model assumes perfect capital markets but permits imperfect product markets for a finite number of periods; with additional assumptions of linear information dynamics. Firm value can be re-expressed as a linear function of equity book value, net income, dividends and other accounting information" (p. 91)

Third, the model has generated substantial interest among accounting academics and is continually being expanded (Dechow et al., 1999; Myers, 1999; Barth et al., 1996; Hand and Landsman, 1999). Fourth, the model alters previous assumptions regarding linear information dynamics by allowing for *other information* to be examined (Feltham and Ohlson, 1995). In doing so, the model provides a role for information that is currently known and reflected in price but is reflected with a lag in the accounting numbers (Beaver, 2002). Finally, the model has been employed by many empirical studies conducted in both developed (Skimo, 1999; Wang et al., 2005) and developing countries (Chen et al., 2001; Hassan et al., 2006; Hassan and Mohd-Saleh, 2010). Indeed, a number of findings have emerged based upon studies that have employed the Ohlson (1995) model: (i) book value and earnings are significant pricing factors; (ii) the relative importance of book value is inversely related to the financial health of the firm; and (iii) abnormal earnings and other accounting information (e.g., disclosures) are among the key predictors of firm value.

This active strand of research provides evidence on the validity of the model's assumptions and the insights about what can be obtained from using the model (Barth, 2000).

Accordingly, the current study applies the Ohlson (1995) model to examine the relationship between firm value and FI disclosure. To this end, the remainder of this section explains the Ohlson model's assumptions as well as the equations used to examine the variables of interest for this thesis.

Three primary assumptions underlie the Ohlson (1995) model. These are: (i) the value of equity is equal to the present value of expected future dividends; the underlying probabilistic framework implies an *objective set of beliefs*[152]; (ii) the clean surplus occurs which means that all changes in assets and liabilities, except those related to dividends, should pass through the income statements; and (iii) the linear information dynamic characterises reality; this variable is defined as current earnings minus the risk-free rate times the beginning of period book value; that is, earnings minus a charge for the use of capital (Ohlson, 1995). Peasnell (1981) stated that since the present value of the expected dividends and the clean surplus relation imply that the market value equals the book value plus the present value of future expected abnormal earnings, the valuation analysis can focus on the prediction of abnormal earnings rather than dividends. Hence, Ohlson (1995) argued that in order to extract these predictions, the dynamics specify that date t+1 expected abnormal earnings are linear in the date *t* abnormal earnings, plus a correction for a scalar variable that represents information other than the accounting data and dividends[153]. The two dynamic equations integrate with the clean surplus relationship to ensure that all value relevant events will be absorbed by current or subsequent periods' earnings and book values (Ohlson, 1995).

[152] In other words, Ohlson (1995) argued that risk neutrality applies so that the discount factor equals the risk-free rate.
[153] The variable for *other information* satisfies a (regular) autoregressive process (Ohlson, 1995).

Based on these three assumptions, Ohlson (1995) developed his model which comprises a number of interrelated equations. Initially, Ohlson (1995) considered an economy with risk neutrality and homogenous beliefs; the market value of the firm in this setting equals the present value of expected future dividends. Given that the interest rates satisfy a nonstochastic process and a flat term structure, the first assumption, *the present value of the expected dividends*, reduces to:

$$P_t = \sum_{\tau-1}^{\infty} R_f^{-\tau} E_t \left[d_{t+\tau} \right] \qquad [5.3]$$

where P_t = the market value (price) of the firm's equity at date t, d_t is the net dividends paid at date t, R_f = is one plus the risk-free rate, E_t = the expected value operator conditioned on the date t information.

Equation 5.3 expresses the first assumption of the model, that the price equals *the present value of the expected dividends*; the model allows for negative d_t, that is, where capital contributions may exceed dividends disbursements[154] (Ohlson, 1995). In addition, the model forces value to depend on accounting data because such data affect the evaluation of the present value of expected dividends.

Moving to the second assumption of the model (the clean surplus assumption); Ohlson (1995) developed a general framework in which value depends on earnings and book value in addition to current dividends; he argued that each of these three variables are relevant in their own way, but in no sense does the model rely on ideal accounting constructs as in

[154] In order to avoid the cumbersome but more precise expression *dividends net of capital contributions*, it is simply refer to as d_t dividends (Ohlson, 1995).

economic earnings plus a random error. Specifically, Ohlson (1995) labelled the first two variables as follows: (i) x_t which represents the earnings for the period (t-1, t); and (ii) y_t which represents (net) book value of equity at date t. Indeed, Ohlson (1995) argued that labelling x_t and y_t is obviously arbitrary and gratuitous unless the model utilises structural attributes inherent in accounting; of interest are the two closely related concepts: (i) the change in book value between two dates equals earnings minus dividends; hence, the model forces the clean surplus relation to hold; and (ii) dividends reduce current book value, but not current earnings. In order to formalise these two aspects of owners' equity accounting, Ohlson (1995) introduced the following mathematical restrictions:

$$y_{t-1} = y_t + d_t - x_t \qquad [5.4a]$$

$$\partial y_t / \partial d_t = -1 \ , \ \partial x_t / \partial d_t = 0 \qquad [5.4b]$$

Equations 5.4a and 5.4b express the clean surplus assumption of the model[155]. This clean surplus relation (equation 5.4a) can then be applied to express P_t in terms of future (expected) earnings and book values in lieu of the sequence of (expected) dividends in the present value of expected dividends formula.

Thus, defining abnormal earnings as $x_t^a \equiv x_t - (R_f - 1)y_{t-1}$ and combining this with the clean surplus restriction in equation 5.4a, this definition implies that $d_t = x_t^a - y_t + R_f y_{t-1}$. Using this expression to replace d_{t+1}, d_{t+2}, ... in the present value of the expected

[155] Even though equation 5.4b does not follow from equation 5.5a, equation 5.4b is consistent with equation 5.4a in the sense that $\partial y_{t-1} / \partial d_t = \partial y_t / \partial d_t + \partial d_t / \partial d_t - \partial x_t / \partial d_t$ which denotes 0 = -1+1- 0. This differentiation between assumptions 5.4a and assumption 5.4b is made because the model is based on latter.

dividends formula resulted in the first basic equation of Ohlson's (1995) model which yields:

$$P_t = y_t + \sum_{\tau=1}^{\infty} R_f^{-\tau} E_t\left[x_{t+\tau}^a\right] \qquad [5.5]$$

where P_t = the market value (price) of the firm's equity at date t, y_t = (net) book value of equity at date t, R_f = is the risk-free rate plus 1, E_t = the expected value operator conditioned on the date t information, x_t^a = abnormal earnings.

Ohlson (1995) argued that providing $E_t[y_{t-\tau}]/R_f^{\tau} \to 0 \text{ as } \tau \to \infty$ assuming that the last regular condition is satisfied; the clean surplus equation implies equivalence of equation 5.5 and the present value of the expected dividends equation (e.g. Edwards and Bell, 1961; Peasnell, 1980). In equation 5.5, x_t^a refers to abnormal earnings; this terminology is motivated by the concept that *normal* earnings should relate to the normal return on the capital invested at the beginning of the period, that is, net book value at date t-1 multiplied by the interest rate (Ohlson, 1995). Thus, one can interpret x_t^a as earnings minus a charge for the use of capital. A positive x_{t+1}^a indicates a profitable period since the book rate of return x_{t+1}/y_t exceeds the firm's cost of capital, R_f -1.[156]

The final assumption of the model concerns the time-series behaviour of abnormal earnings. Ohlson (1995) argued that since any analysis of the valuation function depends critically on various aspects of this assumption, it requires careful explanation; a systematically simple linear model formulates the information dynamics. Thus, two

[156] This relation has a straightforward and intuitively appealing interpretation: a firm's value equals its book value adjusted for the present value of anticipated abnormal earnings. In other words, the future profitability as measured by the present value of the anticipated abnormal earnings sequence reconciles the difference between market and book value (Ohlson, 1995).

variables enter the specification which are abnormal earnings, x_t^a, and other information, v_t. In this way, the assumption about the information dynamic is expressed. Assuming that $\{x_\tau^a\}_{\tau\geq 1}$ satisfies a stochastic process, then the second basic equation of the model is developed as follows:

$$x_{\tau+1}^a = \omega x_t^a + v_t + \varepsilon_{1t+1} \qquad [5.6a]$$

$$v_{t+1} = \omega x_t^a + \gamma v_t + \varepsilon_{2t+1} \qquad [5.6b]$$

Where the disturbance terms, $\varepsilon_{1\tau}, \varepsilon_{2\tau,} \tau \geq 1$, are unpredictable, zero-mean, variables; that is, $E_t[\varepsilon_{kt+\tau}] = 0, k = 1,2$ and $\tau \geq 1$. Indeed, the third assumption places no restrictions on the variances and covariance of the disturbance terms; hence, the variances may be heteroscedastic. The parameters of the process, ω and γ, are fixed and known[157]. The final condition refers to the assumption that the unconditional means of x_t^a and v_t are zero (Ohlson, 1995).

Based upon these three fundamental assumptions of the Ohlson (1995) model which are expressed in equations [5.3-5.6], Ohlson (1995) derived the valuation model based on equation 5.5, and evaluated $\sum R_f^\tau E_t[x_{t+\tau}^a]$ given the information dynamic. Hence, the linearity in the specification of the model leads to a linear solution:

$$P_t = y_t + \alpha_1 x_t^a + \alpha_2 v_t \qquad [5.7]$$

Where $\alpha_1 = \omega/(R_f - \omega) \geq 0$, $\alpha_2 = R_f/(R_f - \omega)(R_f - \gamma) > 0$.

Equation 5.7 implies that the market value equals the book value adjusted for (i) the current profitability as measured by abnormal earnings; and (ii) other information that modifies the prediction of future profitability.

[157] In loose terms, a firm's economic environment and its accounting principles determine the exogenous parameters ω and γ. The parameters are restricted to be non-negative and less than one.

Adding more structure through assumptions relating to information dynamics, Ohlson (1995) derived the following equation:

$$P_t = (1-K)y_t + K(\varphi x_t - d_t) + \alpha_2 v_t \qquad [5.8]^{158}$$

where K= $(R_f - 1)\alpha_1 = (R_f - 1)\omega/(R_f - \omega)$, $\varphi = R_f/(R_f - 1)$, v = other information except abnormal earnings, x_t = earnings for the period (t-1, t), d_t = net dividend paid at date t, ω and α are known parameters with values between 0 and 1.

Equation [5.8] indicates that the valuation model can be viewed as a weighted average of earnings and book value; the equation provides a better understanding of the relative valuation implications of book value and net income in the valuation process (Barth, 2000). Indeed, Ohlson (1995) assumed the clean surplus relation to replace dividends with earnings/book values in the present value formula; then, assumptions on the stochastic behaviour of the accounting data resulted in a multiple-date. Hence, he derived an uncertainty model such that earnings and book value act as complementary value indicators. Thus, the framework for the examination of the cross-sectional association between firm value and FI disclosure in the current study is based on the above equation. This equation is seen as a theoretical foundation for an empirical study between market value, book value of equity and earnings (Easton, 1999). The linear regression of this model is:

$$P_{it} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 Earnings_{it} + \varepsilon_{it} \qquad [5.9]$$

[158] Using the definition of x_t^a, equation 5.8 also equals $P_t = y_t + \alpha_1 x_t - \alpha_1 (R_f - 1) y_{t-1} + \alpha_2 v_t$. If one further replaces y_{t-1} with the right-hand side of the clean surplus equation 5.4a, then the simplification yields equation 5.8.

where P_{it} is the market value at the year end t for firm i, BV_{it} is the book value of equity at year end t for firm i and $Earnings_{it}$ is earnings for year t available to firm i's common shareholders.

In order to investigate the value relevance of FI disclosure, a number of models are developed from Equation 5.9. In particular, models were developed to examine both the overall percentage of FI-related items disclosed in the financial statement (POFID) and the sub-components of FI disclosure. These models are explained in Chapter 7.

5.7 Statistical Analysis

The tests in the current study were estimated using SPSS 19 and E-views 7; parametric and non-parametric measures were employed to examine the relationships among the variable constructed. Specifically, the study performed a number of statistical tests. First, a Wilcoxon Rank test was employed to test whether there is significant difference between FI disclosure pre- and post- the introduction of IFRS 7. In addition, the study employed the parametric equivalent measure of the Wilcoxon test, the Paired-Samples T-test. Second, a Kruskal-Wallis test was employed to investigate whether FI disclosure varies within firm industry. Regarding the second empirical work - the value relevance analysis of FI disclosure - the study developed a multiple regression models based on Ohlson's (1995) model to examine the relationship between firms' market value and a number of independent variables including the book value of equity, net earnings and FI information. In order to ensure that the study's analysis was free from statistical errors, the study performs diagnostic tests namely: (i) a multicollinearity diagnostic; (ii) heteroskedasticity-consistent standard errors and covariance test; and (iii) normality test.

5.8 Conclusion

This chapter outlines the research methodology and methods relating to the current investigation. The chapter discussed the philosophical assumptions underpinning the research process. Fundamental philosophical assumptions were discussed using Burrell and Morgan's (1979) framework. The philosophical assumptions as well as the objectives of the present study were then identified. This was followed by an outline of the relevant quantitative research methods to be used in the current research. The disclosure index and Ohlson's (1995) model were identified and discussed to achieve the objectives of the study. Jordan adopted IAS/IFRS in 1997; this long time span of applying such standards provides an incentive to examine the value relevance (usefulness) of FI disclosure to see (i) the compliance of Jordanian listed companies with the new accounting standards; and (ii) how investors in the Jordanian capital market (investors) perceived the publicly available accounting information.

Chapter Six

The Extent of Financial Instruments Disclosure in Jordanian Listed Companies' Annual Reports: Analysis and Discussion

6.1 Introduction

Regulation is considered one of the most important factors in order to enhance corporate disclosure (Beyer et al., 2010). Over the last two decades, Jordan has experienced fundamental changes in terms of regulating its business environment. This development has been represented by: (i) the introduction of several business laws in general, and accounting regulation in particular; (ii) the implementation of economic reforms in order to liberalise the economy and attract foreign investment; and (iii) the adoption of IAS/IFRS for Jordanian listed companies since 1997[159].

Before accounting regulations about FI disclosure were adopted, a number of investigations revealed that companies were reluctant to publish information about their usage of FIs in annual reports on a voluntary basis (Mahoney and Kawamura, 1995; Berkman et al., 1997; Grant and Marshall, 1997; Dunne, 2003; Hafiz, 2003). Thus, regulatory bodies throughout the world, including FASB, the IASB, and the ASB have sought to introduce accounting standards to deal with FI disclosure in an attempt to mandate the provision of a minimum level of FI-related information in financial statements. Several studies have investigated the impact of these pronouncements on the extent of FI disclosure in both developed and developing markets (Edwards and Eller, 1995; Roulstone, 1999; Chalmers and Godfrey, 2000; Chalmers, 2001; Dunne et al., 2004; Woods and Marginson, 2004; Hamlen and Largay, 2005; Hassan et al., 2006; Lopes and Rodrigues, 2006; Rahahleh and Siem, 2009; Strouhal, 2009; Murcia and Santos, 2010). As Chapter 3 highlighted, a number of findings have emerged from these studies.

[159] These reforms were examined in detail in Chapter 2.

The evidence in Chapter 3 documented that corporate disclosure behaviour in this area is mixed with a significant amount of non-compliance among firms. That is, there are considerable variations in the amount of FI disclosure provided by companies in both developed and developing countries although disclosure is lower in emerging markets (Hamlen and Largay, 2005; Strouhal, 2009). In this regard, Ahmed and Nicholls (1994) suggested that an inadequate regulatory framework and the absence of strict enforcement mechanisms and a well-established accounting profession, represented the main reasons why companies in developing countries did not fully comply with accounting regulations in this area.

In addition, the review of the literature in Chapter 3 highlights that large variations exist within FI-related disclosures *per se* with fair value details being the most widely published and hedge-related data is the least published FI-type information in financial statements (e.g. Hassan et al., 2006). Third, accounting standards about FIs have been successful at enhancing the provision of FI-related information in financial statements (e.g. Chalmers, 2001). Given the dynamic nature of developments in FI products, most studies in the field have suggested that accounting standard-setters should continually monitor their existing pronouncements in order to adapt FI-related disclosure as new products are developed and existing financial products change (Roulstone, 1999; Chalmers and Godfrey, 2000; Chalmers, 2001; Hamlen and Largay, 2005; Hassan et al., 2006; Rahahleh and Siem, 2009). The current investigation attempts to help accounting standard-setters by reporting on disclosure practices about FIs among Jordanian companies over a recent time period when IFRS 7 was adopted.

The previous chapter outlined the methodology and methods employed in this thesis. It also explained the philosophical assumptions as well as the research approach underpinning the current study. This chapter builds upon that analysis and presents the findings from the first empirical investigation of the thesis. In particular, the chapter discusses the results of the disclosure index which was used to examine the extent of FI disclosure published by Jordanian listed companies before and after the implementation of IFRS 7. The remainder of this chapter is organised as follows. Section 6.2 provides a disaggregated analysis of FI disclosure by item and across categories of disclosure; it examines the impact of applying IFRS 7 on the number of Jordanian listed companies that provide FI-related disclosure. Section 6.3 examines whether changes in FI items disclosed are significantly different. Section 6.4 examines FI disclosure across industrial sectors before and after the implementation of IFRS 7. Section 6.5 evaluates the narrative disclosure provided in the annual reports as a result of implementing IFRS 7. Section 6.6 provides a discussion of the results and highlights the implications of the findings arrived at. Finally, a conclusion for the chapter is provided in Section 6.7.

6.2 A Disaggregated Analysis of Financial Instruments Disclosure Published by Jordanian Listed Companies

The primary objective of this analysis is to assess FI disclosure practices pre- and post- the implementation of IFRS 7 for a sample of Jordanian listed companies. Specifically, the study aims to evaluate FI disclosure provided under IAS 32/30 (pre-IFRS 7) as compared to that supplied under IFRS 7 (post-IFRS 7). In particular, this section outlines the results from investigating the first hypothesis proposed in the current study:

H1: The proportion of Jordanian listed companies disclosing FI disclosure has increased significantly following the introduction of IFRS 7.

IFRS 7 became effective from January 1st 2007; it applies to all industrial sectors and covers all types of FIs. Indeed, the introduction of IFRS 7 has resulted in a number of changes to the requirements concerning FI disclosure[160]. In order to examine the FI information provided by Jordanian listed companies, a disclosure index was constructed; an un-weighted disclosure index instrument is employed where a score of one is given if the item is disclosed and a score of zero is awarded otherwise. Specifically, the index consists of 53 items; 40 of these items were already mandated pre-IFRS 7; these items continue to be mandated together with 13 new items were required by IFRS 7. . The annual reports in 2006 (pre-IFRS 7) and 2007 (post-IFRS 7) were examined for 82 companies listed in the first market of the ASE; these companies are distributed across four main sectors namely: banking (12 firms), financial services (26 firms), manufacturing (26 firms) and services (18 firms)[161].

In order to maintain consistency with IFRS 7's disclosure requirements, the current analysis focuses on information about: (i) the significance of FIs; and (ii) the nature and extent of risks arising from FIs. The remainder of this section is divided into two sub-sections. Sections 6.2.1 and 6.2.2 which analyse the percentage of the sample firms disclosing information about FIs[162]. This approach to reporting the results has been adopted by previous studies which have investigated issues associated with FI disclosure (e.g. Hassan et al., 2006b; 2007; Bischof, 2009).

[160] For further information on these changes, the reader is referred to Section 3.3 in Chapter 3.
[161] Full information about the process involved in constructing the disclosure index and the selection of sample companies is provided in Section 5.5 in Chapter 5.
[162] Table 6.1 represents the first part of IFRS 7 disclosure requirements which include information about the significance of FIs to a firm's financial position and performance (paras, 1a), while Table 6.2 represents the second part of IFRS 7 disclosure requirements which consist of risks arising from the usage of FIs (paras, 1b).

6.2.1 An Analysis of Sample Firms Disclosing Information about the Significance of FI

IFRS 7 is based on the notion that entities should provide disclosures in their financial statements that enable users to assess the impact and importance of FIs for their financial position and performance (IFRS 7, para. 1). Table 6.1 reports the proportion of Jordanian listed companies disclosing FI information pre- and post- the implementation of IFRS 7 by item; the table shows the actual number of companies disclosing each item divided by the number of companies (NC column) for whom this item is applicable[163]. In addition, the table illustrates the number of companies which newly disclosed (ND column) or stopped disclosing (NTD column) items under IFRS 7. A comparison between the number of companies disclosing FI information before IFRS 7 and those disclosing this information after IFRS 7 reveals that the implementation of this standard was associated with a growth in the supply of information within and across all disclosure categories; the number of companies in the NC column post-IFRS was always higher than the number of companies in the NC column pre-IFRS 7. However, this growth in the number of compliant companies was not uniform across all items; a great deal of variation was noted within and across disclosure categories.

A number of points emerge from an analysis of Table 6.1. First, Table 6.1 indicates that even though information on *accounting policies and the objectives of FI* was mandated prior to IFRS 7, there was a large variation across items; this category includes 4 items. In particular, only 2 companies published item 2 (terms and conditions for FI designation), 20 companies reported item 4 (terms and conditions of impairment), 47 companies provided

[163] All items were checked to see if they were applicable or not (NA) based on a firm's operations. For example, 7 companies had on average 4 NAs in the *hedge disclosure* category because such information did not relate to any part of their operational activities

item 3 (recognition and measurement of FI) while 65 companies disclosed item 1 (the nature of FI). Instead, after implementing IFRS 7 the number of companies that supplied information about their accounting policies for, and objectives of FIs increased. In particular, the number (percentage) of companies disclosing items 1, 2, 3 and 4 increased respectively to 73 (89%), 34 (41%), 80 (98%) and 54 (66%). In addition, the variability in the number of companies that disclosed this information decreased across the items; it ranged from 3% to 79% pre-IFRS 7, while it ranged from 41% to 98% after IFRS was implemented. An analysis of the ND column of Table 6.1 reveals that the number of companies which started to disclose such information increased; specifically, over 30 new companies disclosed items 2, 3 and 4, while item 1 was provided by 8 new companies for the first time in 2007.

IFRS 7 requires firms to publish their FIs in the balance sheet under specific classes including both derivatives and non-derivative instruments. Table 6.1 also highlights that the number of companies disclosing FI-related items in their balance sheet grew dramatically with the implementation of IFRS 7[164]. This category includes 7 items; nearly 100% of the sample provided item 5 (FIs at fair value through profit or loss held for trading), item 8 (available-for-sale financial assets) and item 9 (loans and receivables) after IFRS 7 became effective. The comparable percentages of sample companies supplying such data before IFRS 7 were 64%, 52% and 78% respectively. The table also indicates that over 88% of companies complied with the disclosure of item 11 (the carrying amounts of each class of FIs) which was newly mandated by IFRS 7. However, no company published this item on a voluntary basis before IFRS 7 was introduced. Some 82% of companies supplied item 7

[164] Regarding derivative and non-derivative classification of FIs in the financial statements of Jordanian listed companies, most companies were implicit; they just categorised their FIs according to the requirements of IFRS 7. However, only 10 companies divided their FIs into derivative and non-derivative; these included 5 banks, 2 financial services, 1 services and 2 industrial companies.

(held-to-maturity investments) after IFRS 7 became effective as compared to 54% of firms which provided this information beforehand. Even though item 6 (FIs at fair value through profit or loss designated) was mandatory before IFRS 7, none of the Jordanian companies in this study disclosed it although 10 companies supplied such information after IFRS 7 was adopted.

Table 6.1: The Proportion of Jordanian Listed Firms Disclosing Items of FI Information: 2006 and 2007

No.	Items	NS	Pre-IFRS 7 (2006)		Post-IFRS 7 (2007)			
			NC	%	NC	%	ND	NTD
Accounting Policies and Objectives Disclosures								
1	The nature of FI	82	65	79	73	89	8	0
2	Terms and conditions for FI designation	82	2	3	34	41	32	0
3	Recognition and measurement of FI	82	47	57	80	98	33	0
4	Terms and conditions of impairment	82	20	24	54	66	34	0
Balance Sheet Disclosures								
5	FI at fair value (FV) through profit or loss held for trading	82	64	78	82	100	18	0
6	FI at FV through profit or loss designated	82	0	0	10	12	10	0
7	Held-to-maturity investments	82	54	66	67	82	13	2
8	Available-for-sale financial assets	82	52	63	80	98	28	0
9	Loans and receivables	82	78	95	82	100	4	0
10	Financial liabilities measured at amortised cost	82	31	37	54	66	23	3
11	The carrying amounts of each class of FI *	82	0	0	72	88	72	0
Income Statement Disclosures								
12	Net gains/losses by classes of FI	82	81	99	82	100	1	0
13	Interest income	82	48	59	58	71	10	4
14	Interest expense	82	48	59	58	71	10	4
15	Fee income	82	0	0	1	1	0	0
16	Interest income on impaired FI	82	0	0	11	13	11	0
17	Impairment losses	82	9	11	58	71	49	2
Hedge Information								
18	Description of each type of hedge	82	16	20	30	37	14	0
19	FI designated as hedging instruments and their FV*	82	4	5	21	26	17	1
20	Nature of risks being hedged	82	3	4	19	23	16	1

21	Recognised gains/losses on hedge ineffectiveness*	82	0	0	13	16	13	0
22	For FV hedge: gains or losses on hedging instruments	82	1	1	9	11	8	0
23	Gains or losses on Cash Flow Hedge (CFH)	82	1	1.5	6	8	5	1
24	Period when CFH are expected to occur and affect profit or loss	82	1	1.5	6	8	5	1
25	Forecast transaction for which hedge can be used	82	1	1.5	6	8	5	1
26	Amount recognised/removed in/from equity during the period	82	1	1.5	6	8	5	1
Fair Value Information								
27	Measurement methods	82	81	99	82	100	1	0
28	Information if FV cannot be measured	82	59	72	82	100	23	0
29	Fair values for each class of FI	82	70	85	82	100	12	0
30	Changes in FV of FI	82	33	40	53	65	20	2
31	Comparable carrying amounts*	82	0	0	69	84	69	0
32	Amount recognised/removed in/from equity	82	0	0	40	49	40	0
Other Information								
33	Information on reclassification	82	1	1	16	20	15	0
34	Information on derecognition	82	2	3	18	22	16	0
35	FI pledged as collateral	82	3	4	17	23	14	5
36	Allowances account for credit losses	82	3	4	10	13	7	0
37	Compound FI	82	2	3	5	6.5	3	0
38	Defaults and breaches	82	1	1.5	2	3	1	1
39	FI either past due or impaired*	82	0	0	12	15	12	0

Note: This table shows the proportion of Jordanian listed companies disclosing FI information items and categories for both 2006 (pre-IFRS 7) and 2007 (post-IFRS 7). NS is sample size, NC refers to the number of companies disclosing FI information. ND is the number of new companies disclosing FI information after IFRS 7 was implemented; and NTD refers to the number of companies not disclosing FI information post-IFRS 7.

A visual inspection of Table 6.1 reveals that the number of companies disclosing balance sheet information increased across all items; the number of companies which started to supply these items (items 5-11) was 18, 10, 13, 28, 4, 23 and 72 respectively (see the ND column). On the other hand, 2 companies stopped disclosing item 7 and 3 companies stopped providing item 10 (see the NTD column).

A further analysis of Table 6.1 reveals that the number of companies that supplied *income statement* disclosures increased following the adoption of IFRS 7. For example, the number of companies which provided item 13 (Interest income) and item 14 (Interest expense) was 23% higher after the implementation of IFRS 7. In addition, the table shows that only 9 companies (11%) provided items 17 (impairment losses) before IFRS 7, while 58 companies (71%) published such information after IFRS 7 was implemented. However, this dramatic improvement in the provision of FI information in the income statement was not universal. Specifically, there was a high level of non-compliance by a large number of companies regarding items 15 and 16 both before and after the introduction of IFRS 7. For example, while these items were not disclosed at all before IFRS 7, only one company provided item 15 and only 11 companies published item 16 after the new standard became effective. A further analysis of Table 6.1 reveals that 4 new firms started publishing items 13 and 14 (ND column) for the first time, while 2 companies stopped providing item 17 (NTD column).

In terms of *hedge information*, Table 6.1 reveals that this data was reported by the smallest number of companies; a sizeable instance of non-compliance among the sample companies was detected for items in this category. For example, only 30 companies (37% of sample firms) published information regarding item 18 (description of each type of hedge) after

IFRS 7 was implemented as compared to 16 companies (20% of sample firms) beforehand. Despite this low overall level of disclosure, all items relating to hedge information were provided by a larger number of companies after IFRS 7 was adopted. For example, disclosure items 19 to 22 were supplied by 26%, 23%, 16% and 11% of sample companies respectively after the implementation of IFRS 7 as compared to a percentage of between 1% and 5% of sample firms previously. The table also indicates that there was a great deal of variation in the number of companies initiating disclosures in this category; they ranged from 8 to 17 companies (see ND column). However, one company (WIVI Co.) discontinued the publication of information about its hedging activities after IFRS 7 was implemented[165].

An analysis of Table 6.1 reveals that Jordanian listed companies believe that FIs should be measured using fair value estimates. Nearly 100% of the companies supplied information on the measurement methods used to quantify FIs (item 27) over the two periods. However, the table indicates that a larger number of firms provided other fair value information under IFRS 7. In particular, the whole sample provided information in circumstances where fair value could not be measured (item 28) and fair values for each class of FIs (item 29) after IFRS 7 was implemented. The comparable percentages for these items were 72% and 85% of sample firms beforehand. A detailed inspection of Table 6.1 also reveals that information about the amount recognised/removed in/from equity (item 32) was ignored by all companies before IFRS 7, however, it was disclosed by 40 companies after IFRS 7 was adopted. In addition, item 31 which was a new requirement under IFRS 7 was disclosed by 69 companies (84% of sample firms) in their 2007 accounts, while none of the companies provided such information on a voluntary basis. This suggests that the introduction of IFRS

[165] No explanations were provided by this company about why it stopped provided such information.

7 was not problematic since a large number of firms complied with the new items mandated. In addition, the standard may have been seen as useful since a large number of companies disclosed information on fair value for the first time; they ranged from 1 company for item 27 to 69 companies for item 31, while only 2 companies stopped reporting information on changes in the fair value of their FIs (item 30). Finally, the standard seems to have been relatively comprehensive in terms of its requirements; Table 6.1 reveals that other disclosures about FIs (items 33-39) were made by a relatively small number of firms - however, this number increased slightly across all items in this category after IFRS 7 was implemented.

6.2.2 An Analysis of Sample Firms Making Risk Disclosures Arising from FI

As discussed earlier in this chapter, the second main requirement of IFRS 7 is to provide information about risks arising from FI usage. To this end, this sub-section is devoted to analysing this information which is provided by Jordanian listed companies. Table 6.2 displays data about the percentage of the sample companies disclosing information about the risks associated with FI usage by item and category. First, a visual inspection of the disaggregated data in this table reveals that a larger number of Jordanian companies supplied information about all categories of risk disclosure after IFRS 7 was implemented. However, this growth in the number of disclosing companies varied within and across the different categories. Specifically, the table reports that the number of companies which provided qualitative risk disclosures, including information about how firms manage (item 40) and measure their risks (item 42) as well as their objectives for and policies about risk management (item 41) were published by a small number of firms; they ranged from 0 to

19 companies before IFRS 7 become effective[166]. On the other hand, after IFRS 7 was adopted, some 93% of Jordanian listed companies informed the reader in their financial statements about how risks arose (item 40), while 88% of the sample described their firms' objectives, policies and procedures for managing FI-related risks (item 41). A smaller percentage (45%) reported the methods used to measure FI-related risks in their annual reports (item 42), while only 26% outlined changes in this area from 2006 (item 43). A further analysis of Table 6.2 reveals that several companies started disclosing information about qualitative risk after IFRS 7 was adopted; they ranged from 21 companies for item 43 to 57 companies for item 40 (see the ND column).

[166] IFRS 7 requires that qualitative information about risks associated with FIs should cover credit risk, market risk and liquidity risk.

Table 6.2: The Proportion of Jordanian Listed Firms Disclosing Items of Risk Information: 2006 and 2007

No.	Items	NS	Pre-IFRS 7 (2006)		Post-IFRS 7 (2007)			
			NC	%	NC	%	ND	NTD
Qualitative Risk Information								
40	How the risks arise*	82	19	23	76	93	57	0
41	Objectives, policies and processes for managing the risks*	82	14	17	72	88	58	0
42	Methods used to measure the risk*	82	0	00	37	45	37	0
43	Changes (in 36,37,38) from previous period *	82	0	00	21	26	21	0
Quantitative Risk: Credit Risk Information								
44	Maximum exposure to credit risk	82	27	33	67	82	42	2
45	Concentration of credit risk	82	26	32	61	74	33	2
46	Credit quality of FI that are neither past due nor impaired*	82	0	0	28	34	28	0
47	Collateral held as security and other credit enhancements*	82	0	0	25	31	25	0
Quantitative risk: Market Risk Information								
48	Maximum exposure to market risk	82	21	26	72	88	55	4
49	Concentration of market risk	82	01	01	38	46	37	0
50	Maturity dates	82	20	24	55	67	35	0
51	Sensitivity analysis of market risk*	82	0	0	35	43	35	0
Quantitative risk: Liquidity Risk Information								
52	Maximum exposure to liquidity risk*	82	23	28	64	78	41	0
53	Maturity analysis*	82	23	28	49	60	26	0

Note: This table shows the proportion of Jordanian listed companies making risk disclosures by items and categories for both 2006 (pre-IFRS 7) and 2007 (post-IFRS 7). NS: sample size, NC: the number of companies disclosing FI information, ND: the number of new companies disclosing FI information after IFRS 7 was implemented and NTD: the number of companies not disclosing FI information post-IFRS 7.

In terms of the quantitative risks associated with FIs, IFRS 7 states that disclosures should cover credit risk, market risk and liquidity risk. Table 6.2 provides a detailed analysis of the percentage of companies supplying risk-related information for the different categories as well as for the actual items of information. A visual inspection of this table shows that an increasing number of firms published information across all categories of quantitative risk disclosure after the implementation of IFRS 7. For example, credit risk information included 4 items; two of these were mandated under both standards; item 44 (maximum exposure to credit risk) and item 45 (concentration of credit risk); the remaining two items - item 46 (credit quality of FI that are neither past due nor impaired) and item 47 (collateral held as security and other credit enhancements) - were newly required by IFRS 7. The first two of these items were provided by 67 and 61 companies after IFRS 7 was implemented, while they were reported by 27 and 26 companies respectively before IFRS 7; this represents an increase of over 40% of the sample firms which disclosed this information. The other two items were both supplied by over 30% of sample firms after IFRS 7 was adopted and none of the firms had volunteered the information before 2007. A further inspection of Table 6.2 reveals that a large number of companies started disclosing credit risk information after IFRS 7 was adopted; they ranged from 25 companies for item 47 to 47 companies for item 45 (ND column). The table also shows that only 2 companies stopped disclosing items 44 and 45 (Credit risk information). This result suggests that companies adhered to the new disclosure requirements about credit risk which were contained in the standard.

Table 6.2 reveals that the proportion of the sample firms which included information about market risk in their annual reports grew across all disclosure items after the implementation of IFRS 7. IFRS 7 added a new requirement to market risk disclosure; specifically, details

about the "sensitivity analysis of market risk" were mandated in the new standard. Although no companies reported this information on a voluntary basis pre-IFRS 7, an average of 43% of companies supplied the data post-IFRS 7. The evidence in Table 6.2 reveals that existing requirements about market risk disclosure under IAS 32/30 were complied with by a large number of Jordanian companies after IFRS 7 become effective. Specifically, in the 2007 financial statements, 88% of firms outlined their maximum exposure to market risk, 67% supplied details about debt maturity dates while 46% of companies explained about the concentration of market risk to which they were exposed. The comparable percentages for these three sub-categories in 2006 were 26%, 1% and 24% respectively. Table 6.2 reports that over 30 firms provided information about items 49, 50 and 51 for the first time, while 55 companies initiated disclosures about item 48 under IFRS 7; however, 4 companies stopped publishing details about this item.

Finally, Table 6.2 reveals that the provision of data about liquidity risk disclosure increased after IFRS 7 was implemented. There were only two items in this category and a majority of firms supplied details about both aspects of liquidity risk after IFRS 7 was adopted: maximum exposure (78%) and maturity analysis (60%). The evidence in Table 6.2 indicates that 41 new companies supplied information about maximum exposure to liquidity risk, while 26 firms provided information about debt maturity analysis for the first time in 2007.

Overall, on the assumption that FI usage does not vary dramatically from one year to the next, the result suggests that additional information is being supplied by companies. Tables 6.1 and 6.2 indicate a large increase in the proportion of Jordanian companies disclosing FI-related information in their financial statements. The study also investigates whether this

increase is significant using parametric and non-parametric tests. Table 6.3 reports the results of significance tests between the proportion of companies publishing information about: (i) the significance of FIs to the entity's financial position and performance; and (ii) risks associated with FI usage[167]. A visual inspection of Table 6.3 reveals that the percentage of firms disclosing information about the significance of FI to the entity's financial position and performance was positively and significantly different after IFRS 7 was implemented; it had a median (mean) difference of 0.37 (0.22) and a z-value of 5.445 (t-value of 6.50) with p-values of less than 0.01.

A further analysis of Table 6.3 indicates that the proportion of companies providing information about risks associated with FI increased significantly. In particular, the table illustrates that the median (mean) difference of this information had a value of 0.43 (0.46) and a z-value of 3.297 (t-value of 12.435) with p-values of less than 0.01. The findings in Table 6.3 support the first hypothesis proposed by the current study that the proportion of Jordanian listed companies disclosing FI-related information increased significantly following the introduction of IFRS 7.

[167] Due to the evidence of the non-normality for the variables in Table 6.3, both parametric and non-parametric measures were applied. The p-values of both the Kolmogorov-Smirnov and the Shapiro-Wilk tests of normality were less than 5% indicating that the data were not normally distributed. In addition, the values of skewness and kurtosis were very high.

Table 6.3: The Tests of Significance of the Proportion of Companies Disclosing FI-related Information Pre- and Post- IFRS 7

Variables	Panel A:Wilcoxon Signed Test				
	Pre-Median	**Post-Median**	**Median Difference**	**Z-value**	**p-value**
The Significance of FIs	0.24	0.41	0.37	5.445	0.000
Risks associated with FIs	0.20	0.63	0.43	3.297	0.000
Overall	0.04	0.49	0.45	6.335	0.000
	Panel B: Paired-Samples T-Test				
	Pre-Mean	**Post-Mean**	**Mean Difference**	**T-value**	**p-value**
The Significance of FIs	0.27	0.49	0.22	6.449	0.000
Risks associated with FIs	0.15	0.61	0.46	12.435	0.000
Overall	0.52	0.24	0.28	9.303	0.000

Notes: This table shows the tests of significance of the proportion of companies disclosing FI-related information before and after the implementation of IFRS 7.

6.3 The Level of FI Disclosure Provided By Jordanian Listed Companies

This section examines the level of FI disclosure supplied by Jordanian listed companies pre- and post- IFRS 7. In particular, it aims (i) to investigate the number of items published by the sample firms pre-and post-IFRS 7; and (ii) to test whether changes in the level of FI disclosure over the two periods are statistically significant. In order to determine which type of statistical measures should be employed, a normality test was carried out; the results revealed some evidence of non-normality in the data for all categories of FI disclosure; thus, the non-parametric test (the Wilcoxen test) was selected (see Appendix 6.1). In addition, the study also employed the parametric equivalent of this test (the Paired-Sample t-test) since this is used by other studies in the area; both tests examine whether changes in the level of FI disclosure (number of items published by the sample) after IFRS 7 differed significantly from the information provided beforehand. This investigation should help examining the second hypothesis proposed in the current study:

H2: The level of FI disclosure increased significantly following the introduction of IFRS 7 compared to information provided previously by Jordanian listed companies.

Table 6.4 shows the test of significance for differences in the median (mean) number of disclosure items before and after the implementation of IFRS 7; this analysis is based on the actual items disclosed in the companies' annual reports. As can be seen from Table 6.4, there is very strong evidence that the overall number of FI items provided under IFRS 7 increased significantly. Specifically, the bottom row of Table 6.4 reveals that the overall median (mean) number of items rose from 11 (12.82) beforehand to 26 (27.13) items after IFRS 7 was implemented. The median (mean) difference in the overall number of items published was significantly different from zero; it had a z-value of 7.90 (t-value of 29.50) and p-values of less than 1%.

A number of points emerge from an analysis of Panel A of Table 6.4. First, the pattern of growth in the overall number of FI items disclosed was spread across all seven sub-categories of the checklist. However, the amount of increase varied from one category to another. A visual inspection of the panel A reveals that there were significant increases in the number of items provided (positive median and means differences) across all FI disclosure categories post IFRS 7[168]. For example, *balance sheet* and *fair value* categories accounted for the largest significant increase with median differences of 3.0 and 2.0 items respectively; they had z-values of 7.65 and 7.70 (t-values of 16.40 and 20.0) and p-values of less than 1% respectively. On the other hand, the smallest significant change was associated with the *other disclosures* category with a median (mean) difference of 0.00 (0.70) item; the z-value of 4.65 (t-value of 5.30) indicates that this median (mean)

[168] It was not possible to calculate the median difference for some disclosure (e.g. hedge and other disclosure categories) due to practical problems associated with the way in which the median is calculated. However, this problem is avoided by using the mean.

difference was statistically significant at the 1% level. Panel A of the table reports that disclosure items relating to other sub-categories of FI information also increased significantly after IFRS 7 was implemented namely: accounting policies, income statement and hedge information; they all reported statistically positive and significant median (mean) differences of 1.0 (1.31), 1.0 (1.0) and 0.00 (0.91) respectively with p-values of less than 1%.

Table 6.4: Tests of Significance Among Median and Mean Differences in Items Disclosed for FI Categories Pre-and-Post IFRS 7

Categories of FI Disclosure	Wilcoxon Signed Test					Paired-Samples t-Test				
	Pre-IFRS 7 Medians	Post-IFRS 7 Medians	Medians Difference	Z-value	p-value	Pre-IFRS 7 Means	Post-IFRS 7 Means	Means Difference	t-value	p-value
Panel A: Test of Significance of FI Disclosure										
Accounting Policies	2.0	3.0	1.0	7.45*	0.000	1.63	2.94	1.31	15.50*	0.000
Balance Sheet	3.0	6.0	3.0	7.65*	0.000	3.40	5.45	2.05	16.40*	0.000
Income Statement	3.0	4.0	1.0	6.80*	0.000	2.27	3.27	1.00	09.50*	0.000
Hedge Accounting	0.0	0.0	0.0	4.75*	0.000	0.29	1.20	0.91	05.25*	0.000
Fair Value	3.0	5.0	2.0	7.70*	0.000	2.96	4.98	2.02	20.00*	0.000
Other Disclosures	0.0	0.0	0.0	4.65*	0.000	0.07	0.77	0.70	05.30*	0.000
Panel B: Test of Significance of Risk Arising from FI										
Qualitative Risk	00	2.0	2.0	7.57*	0.000	0.4	2.51	2.11	16.70*	0.000
Quantitative Risk										
Credit Risk	0.0	2.0	2.0	7.00*	0.000	0.65	2.21	1.56	12.46*	0.000
Market Risk	0.0	2.0	3.0	7.20*	0.000	0.51	2.44	1.73	13.30*	0.000
Liquidity Risk	0.0	3.0	2.0	5.36*	0.000	0.56	1.38	0.82	07.09*	0.000
Overall Risk	2.0	8.0	6.0	7.86*	0.000	2.12	8.54	6.42	23.82*	0.000
Overall FI	11.0	26.0	15.0	7.90*	0.000	12.82	27.13	14.18	29.50*	0.000

Notes: This table shows a comparison of FI items published pre-and post-the implementation of IFRS 7. Non-parametric and parametric measures are employed; while Panel A tests the significance of FI disclosure, Panel B illustrates the test of significance for items relating to risk arising from FI usage. An * indicates that values are significant at the 1% level. Medians and Means were calculated based on the actual number of disclosed items for each company.

Panel B of Table 6.4 illustrates the findings from tests of significance for risk disclosure about FI; it reveals that the number of items devoted to risk disclosure associated with FI increased significantly after the implementation of IFRS 7. The table reports that the median (mean) of the number of items relating to the overall level of risk disclosure increased from 2.00 (2.12) pre-IFRS 7 to 8.0 (8.54) after IFRS 7 became effective. The change was significantly different from zero; it had a z-value of 7.86 (t-value of 23.82) and p-values of less than 1%.

This increasing pattern in the number of items disclosed about risk information was significant across all sub-categories including qualitative and quantitative risk disclosures. An inspection of Panel B of the table reveals that qualitative risk disclosure increased significantly after IFRS 7 was adopted; specifically, the median (mean) grew by 2.00 (2.11) items with a z-value of 7.57 (t-value of 16.70) and a p-value of less than 1%. A further analysis of the table reveals that the number of items relating to quantitative risk also grew significantly across all its sub-categories. For example, the median (mean) change for credit risk items was 2.00 (1.56) items; the null hypothesis that this difference was equal to zero was rejected at the 99% confidence interval since the z-value of 7.0 (t-value of 12.46) was above the significance level. As can be seen from the table, differences in the number of items relating to market and liquidity risk disclosures were also significantly higher with p-values of less than 1%. This analysis of significance levels on tests for differences confirms that the impact of IFRS 7 on FI disclosure appears to have been pronounced. As a result, the evidence supports the second hypothesis in the current study. These findings are consistent with the literature which have investigated risk disclosure and uncovered that risk-related regulation has resulted in a significant increase in the amount of, and clarity

about, risk disclosure associated with FI usage (Roulstone, 1999; Hassan et al., 2006; Bischof, 2009; Othman and Ameer, 2009).

6.4 An Analysis of Financial Instruments Disclosure by Industrial Sector

Wallace et al. (1994) argued that industry sector can affect the corporate reporting culture of its constituent companies; they suggested that policies on financial information disclosure differ across sectors. However, others disagree with this suggestion (Wallace et al., 1994; Inchausti, 1997). In fact, the extant literature has provided mixed evidence about the impact of industry on the extent of corporate disclosure. For example, Cooke (1989) found that manufacturing companies disclosed more information than their counterparts in other sectors. However, the findings of Inchausti (1997) and Owusu-Ansah (1998) provided no evidence to support this claim. Indeed, the extant literature on corporate disclosure in general, and on FI disclosure in particular, has focused on whether there is a relationship between corporate disclosure and industry membership. The current study goes beyond this focus by analysing the differences in the behaviour of FI disclosure within and across industries; this analysis is employed for both financial and non-financial companies. The sample of the current study is drawn from four sectors which are banks, financial services, services and manufacturing companies. The current study assumes that the type of industry that a company is located in can partially explain some of a firm's behaviour in relation to corporate FI disclosure. To this end, the current section examines FI disclosure on a sectoral basis pre-and post-the implementation of IFRS 7 by examining both percentage changes (Table 6.5) and results from statistical tests which investigate whether changes in FI disclosure were significant within and across sectors (Tables 6.6 and 6.7). Accordingly, the following two hypotheses are proposed:

H3: There are significant differences in FI disclosures by Jordanian listed companies within and across sectors.

H4: The Comparability of FI disclosure provided by Jordanian listed companies increased within and across sectors after IFRS 7 was implemented.

A summary of the percentage disclosure index is shown for all sectors in Table 6.5 by disclosure category. In particular, the table displays the actual items disclosed (AID column), the minimum number of items provided (MID column), the maximum number of items disclosed (MAD column) as well as an analysis of the total percentage of items disclosed by category for each sector. Panel A provides the analysis before IFRS 7 became effective, while Panel B presents this analysis after IFRS 7 was implemented. An analysis of the bottom row of each panel in the table reveals that IFRS 7 was associated with a 20% increase in the overall number of FI items disclosed; it grew from 32% of items required to be disclosed pre-IFRS 7 to 52% of items required to be published after IFRS 7 was adopted. Indeed, the average number of actual items reported by Jordanian listed companies increased from 14 before IFRS 7 to 29 after the new standard became effective (AID column)[169]. With respect to FI disclosure categories, Table 6.5 indicates that both accounting policies and risk information grew by over 30%. This was followed by both hedge disclosure and other disclosure categories; they both rose by 0.12 after IFRS 7 was implemented. Other categories were also increased, but at different rates.

In general, the findings of the current study are consistent with the notion that accounting standards put pressure on companies to publish more information in order to meet the needs of financial statement users including capital market participants. For example, consistent

[169] A comparison with the results from previous corporate disclosure studies that were conducted in Jordan reveals a similar impact of the implementation of IAS/IFRS. For example, Omar and Simon (2012) examined both mandatory and voluntary disclosure for Jordanian listed companies using the 2003 annual reports. They pointed out that, on average, companies provided 69% of the items included in the disclosure index. In another example, Al-Akra et al. (2010) compared corporate disclosure practices for Jordanian listed companies for the years 1996 and 2004. The study found that 50% of the sample firms disclosed between 80% and 90% of the items included in the disclosure index in 2006, while none of the companies disclosed in that range in 1996. Al-Shiab (2003) conducted a longitudinal study of corporate disclosure for Jordanian listed companies between the period of 1996 and 2000 and found that the percentage of disclosure provided ranged from 45% and 57%.

with the current study, Hassan et al. (2006) pointed out that the largest change in the value of the disclosure index was associated with balance sheet, accounting policies and risk management categories, while changes to hedge accounting remained relatively small. This pattern of increased disclosure items was common across most studies that have examined the impact of new accounting standards in the FI area (Chalmers and Godfrey, 2004; Chalmers, 2001; Hamlen and Largay, 2005). This result is in line with the findings from the extant accounting literature about the impact of the introduction of accounting standards on FI disclosure (Mahoney and Kawamura, 1995; Chalmers, 2001; Bhamornsiri and Schroeder, 2004; Hamlen and Largay, 2005; Bamber and McMeeking, 2010; Prihatiningtyas, 2011)[170]. This result is also consistent with Hassan et al. (2006b) who found that the value of the disclosure index relating to risk information provided by Malaysian listed companies increased by 25%. Specifically, they found that market risk increased by 30%, credit risk grew by 42% and qualitative risk information rose by 29%

A more disaggregated analysis of Table 6.5 reveals that the percentage of FI items provided by banks went up from 52% pre-IFRS 7 to 75% after IFRS 7 was implemented. In particular, the average number of actual items disclosed across banks increased from 22 items pre-IFRS 7 to 42 items post-IFRS 7[171].

In terms of FI disclosure categories, Table 6.5 reveals that, prior to the implementation of IFRS 7, *Risk Disclosure* was the most reported category among the banks with 78% (RD

[170] Although these studies used different measures of disclosure (content analysis and disclosure index), the findings were consistent regarding the impact of accounting standards on the level of information provided.

[171] The table reveals that the number of applicable items varied from one bank to another; they ranged from 40 to 44 items under IAS 32/30. However, all 53 items were applicable for each bank after IFRS 7 was introduced. Not surprisingly, the highest level of FI disclosure was achieved by one of the leading banks in Jordan (ARBK Co) which published 75% of the checklist items before IFRS 7 and 94% of the checklist items after IFRS 7 (OVD column). On the other hand, the lowest level of FI disclosure was provided by JDIB Co. (only 38% of items) pre-IFRS 7 and by SGBJ Co. post-IFRS 7 (64% of items). Further information is provided in Appendix 6.2.

column) of risk disclosure items being published by this sector on average. The *Balance Sheet* category was second with the typical bank supplying details about 74% of the maximum number of items which could be disclosed (BS column). On the other hand, after implementing IFRS 7, *Accounting Policies* was ranked first in terms of disclosure level with 98% of accounting policy items being disclosed in the banks' financial statements. This was followed by the categories of *Risk Disclosure* and *Balance Sheet* with 86% of items provided by the typical bank in the sample. The largest change among the disclosure categories for banks related to *Hedge Disclosures* which grew by 47% across all banks after the adoption of IFRS 7 (HD column). A further analysis of Table 6.5 indicates that all other categories of FI disclosure among banks increased but at different growth rates. However, these changes were not uniform across all banks; for example, Table 6.5 reveals that the minimum number of items published by banks before IFRS 7 was 15 as compared to 34 after IFRS 7 (MID column). On the other hand, the maximum number of items disclosed by banks pre-IFRS 7 was 33 as compared to 50 after IFRS 7 was implemented. Therefore, the assumption that companies in the same sector try to imitate each other in their disclosure may not be true, at least, for companies in developing countries.

In comparison with the results from prior studies which have investigated banks' FI disclosure, the evidence in this chapter suggests that Jordanian banks have consistently and positively reacted to the requirements of IFRS 7 by providing more detailed information about their FI activities. Previous investigations have documented an increase in the FI information provided by banks after new accounting standards were introduced (Edwards and Eller, 1995; 1996; Roulstone, 1999). The current study's results are consistent with these prior studies' findings which suggest that IFRS 7 had a positive influence on the FI-

related information disclosed by large European banks (Ernst and Young, 2008; Hodgeon and Wallace, 2008; Nelson et al., 2008; Bischof, 2009).

Table 6.5: The Percentage of FI Disclosure Index Results for Jordanian Listed Companies by Sectors: 2006 and 2007

FI disclosure											
Sector	**AP %**	**BS %**	**ISD %**	**HD %**	**FVD %**	**RD %**	**OD %**	**OVD %**	**AID**	**MID**	**MAD**
Panel A: Pre-IFRS 7: 2006											
Banks	67	74	61	22	67	78	11	52	22	15	33
Financial services	38	46	42	01	55	15	1	27	11	6	15
Services	33	58	34	02	57	33	1	30	11	5	20
Manufacturing	37	56	24	01	62	24	0	28	11	6	21
Overall	41	57	38	04	59	30	2	32	14	-	-
Panel B: Post-IFRS 7: 2007											
Banks	98	86	76	69	93	86	52	75	42	34	50
Financial services	77	78	58	07	81	53	08	48	25	15	36
Services	64	75	54	11	82	56	12	48	25	16	40
Manufacturing	65	76	41	4	81	61	3	46	24	11	40
Overall	73	78	55	16	83	61	14	52	29	-	-

Notes: This table presents details about the proportion of FI information for the banking industry by item and category pre-and post-IFRS 7's implementation. AP refers to Accounting Policies Disclosures, BS refers to Balance Sheet Disclosures, ISD refers to Income Statement Disclosures, HD refers to Hedge Disclosures, FVD refers to Fair Value Disclosures, RD refers to Risk Disclosures, OD refers to Other Disclosures, AI is Applicable Items, AID is Actual Items Disclosed, MID is the minimum number of items disclosed across sectors, MAD is the maximum number of items disclosed across sectors.

A further analysis of Table 6.5 reveals that the overall results of the FI disclosure index for companies in the financial sector increased from 27% of items pre-IFRS 7 to 48% of items post-IFRS 7. In particular, the average number of actual items disclosed increased by 14 items after IFRS 7 became effective[172]; it rose from 11 items before IFRS 7 to 25 after IFRS 7 was adopted. In general, Table 6.5 provides evidence that there has been an increase in the number of items disclosed by the typical financial firm across all FI categories after IFRS 7 became effective. In terms of the categories of FI disclosure, Table 6.5 reveals that the *Fair Value* category recorded the highest level of disclosure among other categories over the two periods with 55% of fair value items being published pre-IFRS 7 and 81% of items being provided post-IFRS 7 (OVD column). A visual inspection of the table reports that the largest change in the amount of FI information provided by firms in the financial sector was associated with *Risk Disclosure* which rose by 38% after the introduction of IFRS 7. On the other hand, *Hedge Disclosure* had the lowest level of FI disclosure among financial firms over the two periods; only 7% of the items in this category were published in the financial statements. In addition, Table 6.5 shows that all other categories of FI disclosure have grown by different rates for the financial firms: i.e. *Accounting Policies* (39%), *Balance Sheet* (32%), and *Other Disclosures* (7%).

Such a finding represents a valuable contribution to the literature in this area since the question of analysing disclosure for non-banking companies has been overlooked in previous studies; prior research has focused either on banks, manufacturing firms and/or service companies. Although one might have expected that financial companies would follow the disclosure behaviour of banks because their activities are similar, the evidence in

[172] This overall mean percentage masks a great deal of variation across companies; at a disaggregated level, the volume ranged from 15% (INMA Co.) to 38% (AAFI Co.) pre-IFRS 7 and between 29% (JNTH Co.) and 68% (IHCO Co.) post-IFRS 7 (Appendix 6.2).

the current study suggests that this is not the case; disclosure practices about FIs among non-banking financial companies is much lower than the information provided by their counterparts in the banking industry.

With respect to the service sector, Table 6.5 reveals that, in general, the overall level of FI disclosure for companies in this industry increased to 48% of disclosure items required under IFRS 7 as compared to 30% of items required under IAS 32. In particular, Table 6.5 indicates that the average number of items which was actually disclosed by companies in this sector doubled from 11 pre-IFRS 7 to 25 post-IFRS 7. An analysis of Table 6.5 suggests that although all sub-categories of FI disclosure increased for service firms after IFRS 7 was implemented, the increase varied from one category to another. A visual inspection of this table reveals that the largest improvement was documented for the *Accounting Policies* category where an additional 31% of disclosure items were provided by companies in this sector in 2007. On the other hand, the smallest change was associated with the *Hedge Disclosure* category which grew by only 9% after IFRS 7 was adopted. In addition, Table 6.4 explains that *Balance Sheet* and *Fair Value* information had the highest overall levels of disclosure among service companies over the two periods, with 58% and 57% of the items required under IAS 32 being published as compared to 75% and 82% of this information being disclosed after IFRS 7 became effective. Not surprisingly, *Hedge Disclosure* recorded the lowest disclosure index value among other categories over the two periods with figures of only 2% pre-IFRS 7 and 11% post-IFRS 7[173]. In fact, most studies in the area have documented a significant lack of hedge information about FIs in companies' annual reports (Hassan et al., 2006b; Bischof, 2009).

[173] Items published for other categories of FI disclosure also increased by various percentages i.e. *Risk Disclosure* (23%), *Income Statement* (20%) and *Other Disclosures* (11%).

Finally, Table 6.5 displays findings about the level of FI disclosure supplied by manufacturing companies included in the study. A visual inspection of this table reveals that the overall level of FI disclosure for companies in this sector increased by 18% of items required to be published; it rose from 28% before IFRS 7 to 46% after IFRS 7 was implemented. Specifically, Table 6.5 illustrates that the average number of items actually disclosed by companies in this sector increased from 11 pre-IFRS 7 to 24 post-IFRS 7.

A more disaggregated analysis of results in this sector reveals that *Risk Disclosure* recorded the largest increase among all of the categories analysed with the number of risk-related items provided by manufacturing companies growing by 37% after IFRS 7 was adopted. This was followed by the *Accounting Policies* category where the number of items increased by 28%. As with all of the other sectors, the smallest improvement was found in the *Hedge Disclosure* and the *Other Disclosure* categories which both grew by just 3%. As with the services sector findings, Table 6.5 highlights that the *Fair Value* and *Balance Sheet* categories had the highest percentage of items disclosed over the two periods by manufacturing companies in the sample; the percentage values for the disclosure index varied from 62% and 56% (pre-IFRS 7) to 81% and 76% (post-IFRS 7) for these two categories. Finally, the table shows that other categories of FI disclosure also increased for companies in this sector but at different rates e.g. *Income Statement* (17%).

The main conclusion to be reached, based on the sectoral analysis of the data, is that the implementation of IFRS 7 had a sizeable influence on FI disclosure both within and across all industries. For example, the greatest level of FI disclosure was published by banks (75% of items required), while the lowest level was provided by companies in the manufacturing sector (46% of items required). More specifically, the largest change in FI disclosure was

provided by the banks where the information supplied after implementing IFRS 7 was 23% higher than that published beforehand. This is followed by the financial sector (21%), the services sector (18%) and the manufacturing sector (17%). In general, FI disclosure for all industries, except banks, was fairly similar; however, differences were noted for some individual firms which reported high or low levels of disclosure compared to their counterparts within and across the industries examined.

In order to test whether these changes in FI disclosure were significantly different within and across sectors, further statistical analysis was conducted. In particular, the Kruskal-Wallis test and its parametric equivalent, the One-Way ANOVA was used to determine whether sectoral changes that were uncovered were similar. In order to determine whether the equal-variance assumption underpinning the One-Way ANOVA was satisfied, *Levene's test for homogeneity of variance*[174] was conducted for each of the two years; the results for Levene's test, which were not significant at the 5% level, indicated that the equal variance assumption for the industry type groups was approximately met for both years' information.

Table 6.6 reports the results of whether FI disclosure within each sector varied by a statistically significant amount; the table provides both the χ^2 (Chi-square) statistic for the Kruskal-Wallis test and F-statistic for the One-Way ANOVA test[175]. A visual inspection of the bottom row of Table 6.6 reveals that the median (mean) differences in the overall FI disclosure within sectors were significant pre-and post-the implementation of IFRS 7; the

[174] A One-Way ANOVA test assumes that the information is normally distributed and that the variability is the same in each sector. As the information in the current study does not meet the first condition, Levene's test is needed to ensure the appropriateness of this test. The null hypothesis of Levene's test is not rejected if the p-value is more than 5%.

[175] While the mean difference may have been influenced by a small number of companies changing their disclosure patterns, the median figures are not affected by such "outlier" observations.

χ^2 values were 28.29 and 27.20 (the F- Statistic was 32.0 and 18.70) for the disclosure index values before and after the implementation of IFRS 7; all statistics had p-values of less than 1%. These statistics represent very strong evidence that the overall number of FI items disclosed was significantly different within sectors. However, this pattern was not consistent across all categories of FI disclosure. For example, while the median (mean) differences associated with *Balance Sheet* were significant with a χ^2 value of 33.31 (F-statistic of 16.40) and p-value of 1% in 2006, these differences were not significant within sectors after IFRS 7 was adopted; they had a χ^2 value of only 4.57 (F- Statistic of 1.50) and a p-value of over 0.20. The table also shows that the median (mean) differences of *Fair Value* information was not significantly different within sectors post the implementation of IFRS 7 with a χ^2 value of 7.60 (F- Statistic of 2.30) and a p-value greater than 0.05 as compared to significant difference beforehand. This result suggests that more Jordanian listed companies complied with *Balance Sheet* and *Fair Value* disclosure requirements than with other categories of information mandated about FIs. Hence, financial statements may have become more comparable after the implementation of this standard. In addition, companies published their FI information under specific categories in the balance sheet and used fair value estimates for such instruments; therefore, financial statements may have reflected the value relevant information about FIs.

By contrast, while the median (mean) differences of *Qualitative Risk* information were not significant before implementing IFRS 7[176], after it was implemented the χ^2 value was 10.17 (F-Statistic was 3.16) with a p-value of less than 0.05. One possible reason for this change in disclosure significance could be the non-mandatory nature of qualitative risk information prior to IFRS 7; very little qualitative information about FIs was published by Jordanian

[176] It had a χ^2 value of 6.47 (F-Statistic of 1.80) and p-value greater than 9%.

listed companies before IFRS 7 was adopted. In addition, this suggests that Jordanian listed companies behaved differently after qualitative risk information became mandatory. Other categories of FI disclosure were significantly different within all sectors after IFRS 7 was introduced (see Table 6.6). This result is consistent with the extant empirical literature (Berkman et al., 1997; Blankey et al., 2000; Chalmers, 2001; Dunne et al., 2004; Prihatiningtyas, 2011). For example, Dunne et al. (2004) found that the implementation of FRS 13 was associated with significant differences in disclosures within the sectors examined.

Table 6.6: Results from the Significance Tests for Differences in FI Items Disclosed Within Industrial Sectors Pre-and-Post IFRS 7

	Kruskal-Wallis Test						One-Way ANOVA					
FI Disclosure Categories	**Difference in Medians**				**Chi-Square**		**Difference in Means**				**F-Statistic**	
	BN	**FS**	**SR**	**MA**	**Pre-IFRS7**	**Post- IFRS7**	**BN**	**FS**	**SR**	**MA**	**Pre-IFRS7**	**Post- IFRS7**
Accounting Policies	1.5	1.5	1.0	1.5	22.12 (0.000)*	19.16 (0.000)*	1.25	1.54	1.23	1.16	13.5 (0.000)*	7.90 (0.000)*
Balance Sheet	2.0	3.0	2.5	2.0	33.31 (0.000)*	04.57 (0.206)	1.58	2.73	1.72	1.81	16.4 (0.000)*	1.50 (0.218)
Income Statement	1.0	1.0	1.5	1.0	34.62 (0.000)*	23.13 (0.000)*	0.91	0.96	1.16	0.96	17.8 (0.000)*	9.20 (0.000)*
Hedge	4.5	0	0	0	30.42 (0.000)*	32.09 (0.000)*	3.25	0.50	0.83	0.27	18.5 (0.000)*	33.5 (0.000)*
Fair Value	3.0	2.0	2.0	2.0	10.16 (0.017)*	07.60 (0.055)	2.25	2.08	2.11	1.77	3.00 (0.033)*	2.30 (0.086)
Other Disclosure	3.0	0	0	0	13.19 (0.004)*	40.10 (0.000)*	0.78	0.19	2.5	0.35	5.6 (0.002)*	27.0 (0.000)*
Qualitative Risk	3.5	2.0	2.0	2.0	06.47 (0.091)	10.17 (0.017)*	2.59	2.23	1.67	2.07	01.80 (0.152)	3.61 (0.017)*
Credit Risk Disclosure	2.0	2.0	2.0	2.0	28.51 (0.000)*	15.96 (0.001)*	1.5	1.34	1.22	2.04	13.46 (0.000)*	6.04 (0.001)*
Market Risk Disclosure	1.0	2.0	2.5	3.0	21.53 (0.000)*	10.10 (0.018)*	1.83	2.0	1.66	2.08	09.11 (0.000)*	3.21 (0.027)*
Liquidity Risk Disclosure	0	1.0	2.0	1.5	12.04 (0.007)*	09.85 (0.020)*	0.59	0.88	0.94	0.77	04.53 (0.006)*	3.56 (0.018)*
Overall Risk Disclosure	6.5	8.0	5.5	8.0	27.48 (0.000)*	18.63 (0.000)*	6.5	6.46	5.5	6.96	16.37 (0.000)*	6.92 (0.000)*
Overall Disclosure	19.5	15	11.5	15	28.99 (0.000)*	27.20 (0.000)*	18.0	14.6	13.3	13.2	32.0 (0.000)*	18.7(0.000)*

Notes: This table shows the test of significance within sectors; a Kruskal-Wallis and a One Way ANOVA test was conducted. BN is banks, FS is financial services, SR is services, MA is manufacturing. * refers to where the difference is significant at the 1% level.

Table 6.6 shows the test of significance of FI disclosure within but not across industries. Hence, an additional test of significance was conducted in order to examine whether changes in FI disclosure varied across different sectors in a statistically significant fashion. Table 6.7 displays the results of the *Bonferroni* test; this test explores whether or not all sectors behaved in a similar fashion pre-and post-IFSR 7; each cell in Table 6.7 shows the mean difference and p-value for the categories examined. A visual inspection of the bottom row in each Panel of this table reveals that while there were significant differences between the overall disclosure of FI items between banks and the other three sectors (financial, services and manufacturing companies) with a p-value of less than 1%, there were no significant differences across the other three sectors; the p-values for financial, services and manufacturing industries were all greater than 5%. However, this pattern of sectoral disclosure was not consistent across all sub-categories of FI disclosure; while some categories were significantly different across all sectors, others were not. For example, Table 6.7 reports that while there were significant differences across sectors in the *Balance Sheet* category pre-IFRS 7, it was not significantly different across sectors after IFRS 7 was adopted[177] (Balance Sheet row of Table 6.7). In another example, while *Fair Value* information was significantly different across all sectors pre-IFRS 7, there were no significant differences in this information post-IFRS 7 (Fair Value row of Table 6.7). These results imply that the implementation of IFRS 7 improved the comparability of financial statements across sectors with regard to these categories.

[177] Some sectors showed no significant differences pre-IFRS 7. For example, there was no significant difference in *balance sheet* information for SR and MA firms before IFRS 7. In addition, there were no significant differences in *fair value information* between FS and SR, and between SR and MA pre-IFRS 7.

Table 6.7: Differences in FI Disclosure Across Industrial Sectors Pre- and Post- IFRS 7

Test of Significance of Mean Differences Across Industries 2006 - Bonferroni Test												
Panel A: Pre-IFRS 7	**BN**			**FS**			**SR**			**MA**		
	FS	**SR**	**MA**	**BN**	**SR**	**MA**	**BN**	**FS**	**MA**	**BN**	**FS**	**SR**
Accounting Policies	1.13* (0.002)	1.33* (0.000)	1..20 (0.001)	-1.13* (0.002)	0.20 (0.759)	0.077 (0.99)	-1.3* (0.000)	-0.20 (0.76)	-0.13 (0.97)	-1.2* (0.001)	-0.08 (0.99)	0.13 (0.97)
Balance Sheet	1.7* (0.000)	0.92* (0.005)	0.88* (0.004)	-1.68* (0.000)	-0.77* (0.004)	-0.81* (0.001)	-0.92* (0.005)	0.77* (0.004)	-0.04 (1.000)	-0.88* (0.004)	0.81* (0.001)	0.04 (1.000)
Income Statement	1.13* (0.003)	1.6* (0.000)	2.17* (0.000)	-1.13* (0.003)	.483 (0.467)	1.04* (0.000)	-1.6* (0.000)	-0.48 (0.467)	0.556 (0.259)	-2.2* (0.000)	-1.04* (0.000)	-0.56 (0.259)
Hedge	1.34* (0.000)	1.25* (0.000)	1.34* (0.000)	-1.340* (0.000)	.09 (1.000)	0 (1.0)	-1.25* (0.000)	0.09 (1.000)	0.09 (1.000)	-1.34* (0.000)	0 (1.000)	-0.09 (1.000)
Fair Value	.564* (0.049)	0.5 (1.000)	0.256 (0.396)	-0.564* (0.049)	-.065 (1.0)	-0.368 (0.396)	-0.5 (0.162)	0.064 (1.000)	-0.244 (1.000)	-0.256 (1.0)	0.308 (0.396)	0.244 (1.000)
Others	.416* (0.000)	.361* (0.000)	.417 (0.000)	-0.417* (0.002)	-.056 (1.000)	0 (1.000)	-0.361* (0.019)	0.056 (1.000)	0.056 (1.000)	-0.417* (0.002)	0.654 (1.0)	-0.056 (1.000)
Qualitative Risk	.603 (0.151)	.389 (1.000)	.487 (0.412)	-.603 (0.151)	-.214 (1.0)	-.115 (1.000)	-.389 (1.000)	.214 (1.000)	.098 (1.000)	-.487 (0.412)	0.115 (1.000)	-.098 (1.000)
Credit Risk	1.61* (0.000)	1.25* (0.000)	1.53* (0.000)	-1.61* (0.000)	-.359 (0.800)	-.077 (1.000)	-1.25* (0.000)	.359 (0.800)	.282 (1.000)	-1.53 (0.000)	0.077 (1.000)	-.282 (1.000)
Market Risk	1.42* (0.005)	.944* (0.011)	1.04* (0.002)	-1.42* (0.000)	-.479 (0.297)	-.385 (0.48)	-.944* (0.011)	.479 (0.297)	.094 (1.000)	-1.04 (0.000)	0.385 (0.48)	-.094 (1.000)
Liquidity Risk	1.03* (0.005)	.667 (0.231)	.949* (0.012)	-1.03* (0.005	-.359 (1.000)	-.077 (1.000)	-.667 (0.231)	.359 (1.000)	.282 (1.000)	-.949 (0.012)	0.077 (1.000)	-.282 (1.000)
Overall Risk	4.66* (0.000)	3.25* (0.000)	4.0* (0.000)	-4.66* (0.000)	-1.41 (0.131)	-0.654 (1.000)	-3.25* (0.000)	1.41 (0.131)	0.756 (1.000)	-4.0* (0.000)	0.654 (1.000)	-0.756 (1.000)
Overall FI Disclosure	11.6* (0.000)	9.5* (0.000)	10.6* (0.000)	-11.256* (0.000)	-1.75 (0.699)	-0.654 (1.0)	-9.5* (0.000)	1.75 (0.649)	1.10 (1.000)	-10.6* (0.000)	0.654 (1.000)	-1.1 (1.000)

Panel B: Post-IFRS 7												
Accounting Policies	0.84* (0.038)	1.36* (0.000)	1.3* (0.000)	-0.64* (0.038)	0.54 (1.0)	0.462 (0.33)	-1.36* (0.000)	-0.52 (0.31)	0.462 (1.0)	-1.3* (0.000)	-0.462 (0.33)	0.6 (1.000)
Balance Sheet	0.538 (0.839)	0.778 (0.282)	0.654 (0.444)	-0.538 (0.839)	0.239 (1.000)	.115 (1.000)	-0.778 (0.282)	-0.239 (1.000)	-0.124 (1.000)	-0.654 (0.444)	-0.115 (1.000)	0.124 (1.000)
Income Statement	1.08 (0.066)	1.36* (0.018)	2.12* (0.000)	-1.08 (0.066)	0.278 (1.000)	1.04* (0.014)	-1.36* (0.000)	-0.278* (0.014)	0.761 (0.245)	-2.12* (0.000)	-1.04* (0.014)	-0.761 (0.245)
Hedge	4.09* (0.000)	3.67* (0.000)	4.32* (0.000)	-4.09* (0.000)	-0.423 (1.0)	0.231 (1.000)	-3.67* (0.000)	0.423 (1.000)	0.654 (0.654)	-4.32* (0.000)	-0.231 (1.000)	-0.654 (0.654)
Fair Value	0.737 (0.114)	0.639 (1.000)	0.737 (1.000)	-0.737 (0.114)	-0.10 (1.000)	0 (1.000)	-0.639 (0.333)	0.10 (1.000)	0.10 (1.000)	.-0.74 (0.114)	0 (1.000)	-0.10 (1.000)
Others	2.6* (0.000)	2.1* (0.000)	2.7* (0.000)	-2.6* (0.000)	-0.432 (0.779)	0.154 (1.000)	-2.1* (0.000)	0.432 (0.779)	0.585 (0.247)	-2.7* (0.000)	-0.154 (1.000)	-0.585 (0.247)
Qualitative Risk	.955 (0.087)	1.30 (0.012)	.994 (0.067)	-.955 (0.087)	.350 (1.000)	.038 (1.000)	.038* (0.012)	-.350 (1.000)	-.312 (1.000)	-.994 (0.067)	-.038 (1.000)	.312 (1.000)
Credit Risk	1.76 (0.001)	1.53 (0.01)	.994 (0.157)	-1.76* (0.001)	-.235 (1.000)	-.769 (0.181)	-.769 (0.10)	.235 (1.000)	-.534 (1.000)	-.994 (0.157)	.769 (0.095)	.795 (0.380)
Market Risk	1.26 (0.023)	1.11 (0.095)	.795 (0.380)	-1.26* (0.023)	-.145 (1.000)	-.462 (1.000)	-.462 (0.095)	.145 (1.000)	-.316 (1.000)	-.795 (0.380	.462 (1.000)	.316 (1.000)
Liquidity Risk	.724 (0.062)	.306 (1.000)	.763 (0.042)	-.724 (0.062)	-.419 (0.525)	.038 (1.000)	-.306 (1.000)	.419 (0.525)	.457 (0.375)	-.763* (0.042)	-.038 (1.000)	-.457 (0.375)
Overall Risk	4.7* (0.000)	4.25* (0.002)	3.5* (0.008)	-4.7* (0.000)	-0.45 (1.000)	-0.115 (1.0)	-4.25* (0.000)	0.449 (1.000)	-0.705 (1.000)	-3.5* (0.008)	1.15 (1.000)	0.705 (1.000)
Overall FI Disclosure	14.6* (0.000)	14.2* (0.000)	15.4* (0.000)	-14.6* (0.000)	-0.363 (1.000)	0.846 (1.000)	-14.2* (0.000)	0.363 (1.000)	1.21 (1.000)	-15.4* (0.000)	-0.85 (1.000)	-1.21 (1.000)

Notes: This table reports the differences of FI disclosure pre-and post-the implementation of IFRS 7 across sectors. In particular, the table shows the results of a *Bonferroni* test which was conducted to examine the differences across industries. BN is banks, FS is financial services, SR is services, MA is manufacturing. Each column includes mean difference and p-value. * indicates the mean difference is significantly different at the 1% level. Each cell in this table includes the mean difference while its p-value is also shown.

A further analysis of Table 6.7 reveals that *Qualitative Risk* disclosure was similar pre- and post- IFRS 7 since no significant differences arose for items disclosed in this category across the sectors. Other categories of FI disclosure showed more mixed results. For example, items published for the *Credit Risk, Market Risk, Liquidity Risk, Other Disclosures* and *Hedge Disclosure* categories were not significantly different across all sectors with the exception of the banking sector[178]. In addition, Table 6.7 illustrates that *Income Statement* information varied across some pairs of sectors pre-IFRS 7; it showed no significant differences between some sectors (FS and SR, SR and MA) while significant differences were noted across others. This pattern in *Income Statement* information was consistent post-IFRS 7; while no significant differences were noted between some sectors (BN and FS, FS and SR, SR and MA), items supplied in other sectors were significantly different.

6.5 Narrative Disclosure and Management Approach of IFRS 7

Narrative disclosure is considered to be a fundamental part of the annual reports that are prepared by corporate management (Elzahar and Hussainey, 2012). Indeed, narrative reporting offers a different approach to communicating with investors and other stakeholders (Rutherford, 2002). Recently, narrative reporting has received a great deal of attention from regulators including FASB, the IASB and the ASB. Specifically, IFRS 7 is an instance of an accounting standard that explicitly mandates qualitative (narrative) disclosures about FI and their associated risks. This section discusses the extent to which Jordanian listed companies complied with the requirements of IFRS 7 with regard to FI-

[178] Exceptions to these results are: (i) significant differences were noted between BN and SR in *Qualitative Risk* disclosures post-IFRS 7; (ii) no significant differences were noted between BN and SR pre-IFRS 7; and (iii) significant differences were noted between BN and MA post-IFRS 7 in *Liquidity Risk* disclosures.

related narrative disclosure and assesses the management views provided in the annual reports by preparers about IFRS 7 for all the 82 companies sampled.

IFRS 7 was issued by the IASB in 2005 and became effective for periods beginning in or after 1st January 2007; the standard regulates all disclosures about FI and applies to all firms (both financial and non-financial). Indeed, the standard has two main requirements; specifically, it states in IFRS 7 that:

> "Companies are required to publish information about: (i) the significance of financial instruments for an entity's financial position and performance; and (ii) qualitative and quantitative information about exposure to risks arising from financial instruments, including specified minimum disclosures about credit risk, market risk and liquidity risk" (IFRS 7, para. IN5).

The standard adopts the management approach whereby a company's management is responsible for the review and endorsement of quantitative risks arising from FI usage. Specifically, the standard states that:

> "The qualitative risk disclosures describe management's objectives, policies and processes for managing those risks and quantitative disclosures provide information about the extent to which the entity is exposed to risk are required to be prepared based on information provided internally to the entity's *key management personnel*" (IFRS 7, para. IN5). sic.

The standard states that *key management personnel* are those defined in IAS 24 which can include an entity's Board of Directors, chief executive officer or any authorised department. Specifically, IAS 24 states that:

> "Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including any directors (whether executive or otherwise) of the entity" (IAS 24, para, 24.9).

IFRS 7 requires public disclosure of certain management information to allow shareholders to view FI and risk management activities through the eyes of management (Muthupandian,

2008). The current study reviews the comments made by the companies' management teams on the adoption of IFRS 7. It does this by reviewing the comments made by the companies' management teams on the adoption of IFRS 7. An analysis of the contents of the annual reports for the sample firms revealed a number of findings. First, the study found that just over 30% of the sampled companies (25 out of 82) identified the authorised personnel who were responsible for reviewing information about FIs and their associated risks; this group was usually specified as either the Board of Directors or the management. Specifically, 10 companies (out of 25) indicated that the Board of Directors was responsible for reviewing such information, while 15 firms stated that the management reviewed risk information.. For instance, BOJX - a bank –stated that:

> "The Executive Committee was renamed to be the Risk Management/Executive Committee. The Committee is in charge of all tasks concerning risks, and is composed of five members of the Board of Directors including [the Chairman and four members]" (Annual Report, 2007, p. 20).

In another example, THBK – a bank - stated that:

> "Risk management responsibility includes: (i) managing and analysing all types of risks (credit, market, and operations) through preparing policies and objectives; (ii) developing measurement and control methodologies for each risk type; (iii) providing the Board of Directors and Executive Management a report about measuring the Bank's risks quantitatively and qualitatively. The Bank's [Board of Directors/Executive Risks Committee] guarantees the availability of an efficient internal control system and ensures its proper performance" (Annual report, 2007, p. 70).

Of the 15 remaining companies[179], all stated that management was in charge of regularly reviewing information about FIs and their associated risks. For example, AEIN – a manufacturing company - stated that:

> "The company's activities expose [the firm] to several types of risk (e.g. credit risk, market risk and liquidity risk). The [Management] of the

[179] These companies include two banks, three financial services, five services and five manufacturing companies.

> company is in charge of, and endeavours to manage, the potential negative results of such risks on the company's financial performance" (Annual Report, 2007, p. 12).

In another example, JOPT – a services company – stated that:

> "The company adopts financial policies for managing all risks arising from FI usage within a specific strategy. The company [Management] controls and monitors risks and performs the optimal strategic allocation for risks associated with FI usage" (Annual Reports, 2007, p. 89).

Second, 40% of companies[180] (33 out of 82) described the risk management process more generally; they simply stated that the [Company] was responsible for managing and preparing risk information associated with FI usage. For example, MSFT - a service company - highlighted that:

> "The [Company] controls the process of risk management; it identifies and implements proper methods to manage all risks that the company is exposed to including credit risk, market risk and liquidity risk" (Annual Report, 2007, p. 45-46).

The remaining companies (30%)[181] did not identify any authorised personnel/department as being responsible for managing the risk information associated with FI usage in their firms. Comparing these results with Mardini (2012) who examined the narrative reporting associated with IFRS 8 for Jordanian listed companies, the current study found a larger number of companies that identified the information authority. In particular, he found that only 43% of sample firms (47 out of 109) identified the personnel authorised to review information relating to IFRS 8, while other companies included in the sample did not identify any authorised department. For example, Mardini (2012) pointed out that the chief executive officer was responsible for reviewing IFRS 8-related information for 24

[180] These companies include five banks, twelve financial services, six services and ten manufacturing companies.
[181] These companies include one bank, ten financial services, five services and eight manufacturing companies.

companies, management for 3 companies, while the Board of Directors for one company's segments.

Local legislation in Jordan states that changes resulting from the implementation of accounting standards (IAS/IFRS) should be disclosed in the annual reports of a company; companies should state whether there will be any changes in the accounting standards that they will employ in a subsequent year (JSC, 1997). Therefore, the study was able to review the comments made by each company's management team about the new standards that would be applied in 2007. The current study did this by analysing the management commentary throughout the annual reports pre- and post- the implementation of IFRS 7. This information was typically provided in the notes, the management commentary or the risk management section of the annual report; only the information included within the financial statements which is subject to the annual audit process was considered.

Accordingly, the study examined companies' annual reports for 2006 to ascertain any comment made by management on the new standard to be adopted in 2007. The study found that only 25%[182] (20 out of 82) of the companies mentioned that IFRS 7 would be effective for the next year starting 1st January 2007. For example, ARBK – a bank – stated that:

> "International Financial Reporting Standard No. 7 concerning disclosures of financial instruments issued and will be effective by January next year. This standard supersedes IAS 30 on disclosures of the financial statements of banks and similar financial institutions. It also amends some of the disclosure requirements of IAS 32, which defined presentation and disclosures of financial instruments. The bank will apply the standard by the effective date" (Annual Report, 2006, p. 105-106).

[182] These companies include seven banks, six financial services, three services and four manufacturing companies.

Of those who mentioned the forthcoming introduction of IFRS 7, 12 companies[183] indicated that the standard would result in additional disclosures about FI and their associated risks. For example, JTEL - a service company - stated that:

> "IFRS 7 is issued and will require new information about FI and its impact on a company's financial position as well as additional information about risks arising from FI usage" (Annual Report, 2006, p. 31).

In another example, JOPH – a manufacturing company – stated that:

> "IFRS 7 was issued by the IASB in August 2005, becoming effective for periods beginning on or after 1 January 2007. The new standard requires additional disclosure about the significance of financial instruments for the company's financial position and performance and information about exposure to risks arising from financial instruments" (Annual Report, 2006, p. 43-44).

The annual reports for 2007 were also examined for comments made by companies' management about the actual impact of IFRS 7's adoption. All companies indicated that the implementation of IFRS 7 had resulted in additional new disclosures about FIs and their associated risks. For example, JOST – manufacturing company – stated that:

> "IFRS 7 became effective from 1st January 2007. The adoption of IFRS 7 resulted in new disclosures about FI and their associated risks" (Annual Reports, 2007, p. 89).

Some 15% of companies[184] (12 out of 82) indicated that the standard had resulted in a change to the presentation of FI information in the financial statements. For example, SHIP – a services company – stated that:

> "IFRS 7 became effective from 1st January 2007. The standard resulted in a restructuring and reclassifying of the financial assets and liabilities in the financial statements under specific categories as required by the standard" (Annual Report, 2007, p. 41).

[183] These companies include five banks, three financial services, one service and three manufacturing companies.
[184] These companies include three banks, two financial services, two services and five manufacturing companies.

Despite these notable exceptions, most companies kept silent about the impact of implementing IFRS 7 on their financial statements. An even bigger majority of the sample firms passed no comments on whether the implementation of IFRS 7 had affected the performance of their firms. Just 10% of companies[185] (8 out of 82) indicated that the standard had had an impact on their firms' financial position and performance. For example, RUMM – a services company – stated that:

> "The implementation of IFSR 7 resulted in the reclassifying of some financial assets and liabilities; hence, this resulted in revaluing these instruments which resulted in a positive impact on the firm's financial performance" (Annual Report, 2007, p. 25).

Once more, the percentage of companies that commented on IFRS 7 (pre- and post-) was higher than those reporting by Mardini (2012); prior to IFRS 8, he found that only 11% of the sample firms indicated that the new standard would be effective over the coming year and 44% of companies suggested that IFRS 8 would not have an impact on firms' financial position and performance. Some of 9% of sample indicated that the new standard would not change current segment reporting and over 35% of companies provided no details. However, this situation changed after IFRS 8 was implemented. In particular, Mardini (2012) found that some 14% of sample firms indicated that IFRS 8 financially influenced these companies and practically changed their segment reporting; over 29% of companies revealed that the standard had no financial impact on their operations, 25% of firms reported that IFRS 8 had not changed their segments and the remaining 32% of sample firms provided no information about the new standard implemented.

[185] These companies include two financial services, three services and three manufacturing companies.

What these narrative disclosures suggest is that a sizeable number of companies' management suggested that the introduction of IFRS 7 had an impact on the information contained in their annual reports. Furthermore, in the year before the standard became effective, a majority of companies were warning investors and other readers of the financial statements that the implementation of this standard was imminent. Thus, some investors and other stakeholders may have been primed to enquire about the new standard and look for its impact on the financial statements of the sample firms. Together with the disclosure index results in the first half of this chapter, the findings suggest that financial statement users may have been prompted to consult the additional disclosures of information published under IFRS 7 about a company's FIs and consider whether such data were useful.

6.6 Discussion of the Findings and Implications

This chapter outlines the findings from the analysis of FI disclosure provided by Jordanian listed companies pre- and post- the implementation of IFRS 7. In general, evidence is provided about the positive impact of IFRS 7 on FI disclosure supplied by Jordanian listed firms. This finding is consistent with the extant literature that has examined the impact of introducing accounting standards concerning FI disclosure in other countries (Mahoney and Kawamura, 1995; Edwards and Eller, 1995; 1996; Berkman et al., 1997; Roulstone, 1999; Blankley et al., 2000; Chalmers and Godfrey, 2000; Chalmers, 2001; Dunne et al., 2004; Woods and Marginson, 2004; Hassan et al., 2006c; Hamlen and Largay, 2005; Lopes and Rodrigues, 2006; 2008; Taylor et al., 2008; Bischof, 2009; Bamber and McMeeking, 2010; Prihatiningtyas, 2011). These studies from the prior literature have indicated that the introduction of accounting standards relating to FIs has been successful in leading to the publication of more information about FIs (mainly derivatives) in companies' financial statements. Hence, information users (mainly investors) may have become more confident

when making investment decisions as they are aware of new risk-related information that can affect a firm's financial position and performance. In this regard, FIs (especially derivative products) have been seen as one of the most influential factors in influencing the overall performance of a company since such instruments can be used to manage a firm's risk profile and cash flows as well as smooth earnings (Bodnar et al., 1995; 1996; 1998; Grant and Marshall, 1997; Naito and Laux, 2011). In addition, the abuse of derivatives was shown to be a contributing factor in the collapse of some companies (see Chapter 3).

A number of findings emerged from the analysis in this chapter which aids our understanding of the impact of IFRS 7 on Jordanian companies. First, the number of Jordanian-listed companies disclosing FI disclosure increased significantly following the implementation of IFRS 7; this increase, on average, more than 30%. The extant literature on the impact of FI-related accounting standards on the number of companies in other countries publishing such information in their financial statements arrived at similar results (Mahoney and Kawamura, 1995; Chalmers, 2001; Bhamornsiri and Schroeder, 2004; Chalmers and Godfrey, 2004; Hamlen and Largay, 2005; Bamber and McMeeking, 2010; Prihatiningtyas, 2011). For example, Chalmers and Godfrey (2004) examined FI disclosure provided by Australian listed firms during the period between 1992 and 1996 and found that the number of firms publishing such information grew significantly after the release of Exposure Draft No.65: Presentation and Disclosure of Financial Instruments. Specifically, the study pointed out that the number of companies publishing FI information grew from 41 (21% of the sample firms) to 96 (51% of the sample firms) after this Exposure Draft was introduced. The authors concluded that Australian companies responded early to the requirements of the Exposure Draft which became effective in 1999.

The results of the current study are also consistent with previous papers that have investigated the impact of other accounting standards on companies in Jordan. For example, Mardini et al. (2012) investigated the impact of IFRS 8 on segmental reporting disclosures provided by a sample of Jordanian listed companies[186]. They found that the number of companies supplying segmental reporting information increased significantly when a new standard (IFRS 8) was adopted. Specifically, the study indicated that the number of compliant companies grew by 20% after IFRS 8 was implemented. By and large, the results of the current study seem to confirm the important role of accounting standards in encouraging companies to publish information about their operations and performances.

Second, an analysis of FI disclosure provided by Jordanian listed companies in the current chapter reveals that the number of FI-related items increased statistically; specifically, the sample firms in this thesis provided 52% of the disclosure index items after implementing IFRS 7 as compared to 32% under IAS 30/32. This result is in line with the findings from the extant literature which suggest that accounting standards concerning FIs have led to a great deal of FI-related information being published in companies' annual reports (Berkman et al., 1997; Roulstone, 1999; Chalmers, 2001; Hamlen and Largay, 2005; Hassan et al., 2006b; Bischof, 2009)[187]. For example, Goldberg et al. (1994) compared disclosures about foreign exchange derivatives under SFAS 105 and SFAS 107; they

[186] IFRS 8 was the standards issued by the IASB after IFRS 7 and was more explicit in terms of the management approach.

[187] It seems that the impact of IFRS 7 on FI disclosure is pronounced. For example, the current study's results are similar to the findings of Bischof (2009) who investigated the adoption of IFRS 7 in 28 European countries; she compared the 2006 and 2007 annual reports of her sample firms and found that the implementation of IFRS 7 led to a significant increase in the quantity of FI-related information in the annual reports. In particular, the study pointed out that IFRS 7 led to an increase in the average length of the financial statements from 81.9 pre-IFRS 7 to 92 pages and an increase in the length of the risk management report from 13.6 pages to 20.5 pages. Both of these increases were significantly different from zero at the 1% level. These results suggest that the impact of the implementation of IFRS 7 has been pronounced regardless of what methods have been employed by empirical studies to investigate it.

pointed out that information disclosure about foreign exchange derivatives increased significantly following the introduction of SFAS 107; specifically, information provided under SFAS 107 was more than twice that provided under SFAS 105. In another example, Hassan et al. (2006) examined FI disclosure for Malaysian listed companies before and after the implementation of MASB 24 (similar to IAS 32) and found that the value of their disclosure index increased by 32%, a figure which is just slightly over that documented in the current thesis for Jordanian companies. Based upon this comparison, it seems that the new accounting standard in this area (including IFRS 7) has contributed to an improvement in the number of FI-related items provided in the annual reports. Thus, not only are more companies providing FI information, but also the number of FI-pieces of data is rising as well.

Third, the industrial analysis of FI disclosure revealed that the highest level of disclosure was provided by firms in the banking sector over the two periods; these companies disclosed 52% of FI-related items pre-IFRS 7 and 75% of items post-IFRS 7. Other sectors provided a slightly lower proportion of the total possible disclosures; this ranged from 18-26% of the items before IFRS 7 to 46-48% after IFRS 7 was adopted. This result is consistent with other extant findings in the corporate disclosure literature which have pointed out that banks tend to provide a larger volume of information as compared to other sectors; presumably because banks are more likely to use FIs, employ the most sophisticated information systems, have enough resources to produce the information required and hire auditors from the Big Four firms who require such information to be published in order to avoid a qualified audit report (Owusu-Anash, 1998; Hossain, 2000; Akhtaruddin, 2005).

The change in the number of Jordanian companies disclosing FI-related information as well as the growth in the level of information provided may also be attributed to a number of other factors. First, Jordanian listed companies may facilitate compliance with such standards in which Jordanian companies have been required to comply with IAS/IFRS since 1997; this means that Jordanian companies are very familiar with IASB disclosure requirements (Al-Akra et al., 2009), hence, the adoption of new accounting standards is no longer problematic for accounting preparers. Second, the open market policies as well as the economic reforms (e.g. privatisation) initiated by the Government have led to an increase in the volume of foreign investment (Mardini, 2012). These changes in market conditions may have placed more pressure on preparers to meet the needs of foreign investors who are used to receiving a satisfactory level of FI-related information in their home countries. Finally, the publicity accorded to IFRS 7 in the financial press (JSC, 2009) may have put further pressure on Jordanian firms to increase their FI disclosures. Indeed, the JSC was keen to show that Jordanian companies were in the lead in terms of compliance with new standards from the IASB in order to attract new (mainly foreign) investors into the Jordan economy (Mardini, 2012). Alternatively, the introduction of the new standards (IFRS 7) as well as the increasing usage of FIs by Jordanian listed companies over the last few years may have caused financial statement preparers to re-evaluate their FI disclosure practices.

Based on the results presented in this chapter, one objective of the standard setter seems to have been achieved with the adoption of IFRS 7; the users of the annual reports were provided with more and new information about companies' usage of FI which may have been useful. Indeed, Beattie et al. (2004) and Urquiza et al. (2009) have argued that disclosure quantity and quality are positively correlated; hence, they suggested that an

increase in disclosure quantity implies an improvement in disclosure quality where financial statements provide users with more information about companies' activities, operations, financial positions and performances (Beretta and Bozzolan, 2008). Consistent with this notion, the current study suggests that the FI disclosures provided by Jordanian listed companies may have become more useful after the implementation of IFRS 7 since a larger number of companies provided a greater level of FI information in their financial statements. This argument is consistent with some accounting theorists' view about the usefulness of accounting information (Ijiri, 1983; Staubus, 2000). For example, Ijiri (1983) argued that, under a decision usefulness approach, the main objective of financial reporting is to provide useful information for economic decisions. He stated that "It does not matter what the information is about, more information is always preferred to less as long as it is cost effective" (p. 75).

Importantly, the industrial analysis of FI disclosure pre- and post- the implementation of IFRS 7 revealed specific aspects of usefulness. In particular, some components of FI disclosure (*Balance Sheet* and *Fair Value*) showed no significant differences within and across sectors post the implementation of IFRS 7 suggesting that the new standard may have enhanced the comparability of such information regarding these categories. Prior to IFRS 7, different accounting standards were applied to both financial and non-financial institutions; while the former applied IAS 30, the latter adopted IAS 32. By contrast, IFRS 7 is applied by all companies irrespective of their industrial affiliation. Indeed, the comparability attribute has been emphasised by both the accounting literature (Staubus, 1976; Pownall and Schipper, 1999) and accounting standard-setters (including the IASB and the FASB) as one of the basic qualitative characteristics necessary for accounting information to be considered useful (Whittington, 2008a, b). For instance, Tower (1993)

argued that one of the primary objectives of financial reporting is to supply more comparable information about the business enterprise. In this regard, Cairns (1995) suggested that IFRS can enhance comparability in four different ways, namely: (i) mandating a specific presentation format; (ii) compelling the use of explicit measurement techniques; (iii) ensuring an increasing level of disclosure; and (iv) requiring additional disclosure. With respect to IFRS 7, its disclosure requirements contribute to all of these mechanisms and therefore improve the comparability of accounting information. The standard requires companies to publish their FI-related information under specific categories using both historical cost and fair value estimation in the financial statements; thus, the presentation format is now more standardised while the measurement rules are more explicit. In addition, IFRS 7 mandates companies to publish new information about FIs[188].

This finding suggests that FI disclosure became more useful after the implementation of IFRS 7 since users can compare information of interest within and across industries when making investment decisions. In this regard, the new approach of the IASB to the FI disclosure also adds to the usefulness of the post-IFRS 7 disclosures published by Jordanian companies. In particular, IFRS 7 requires companies to publish details about all of their FIs in the balance sheet - measured by the most relevant value which is most often the fair value[189]. In addition, such information which was prepared under the management approach may have increased the credibility of information about FIs and associated risks

[188] The industry analysis of FI disclosure revealed that comparability of FI information has increased after IFRS 7 was implemented. The relevance characteristic can be assessed through the value relevance analysis of FI disclosure in Chapter 7. In this respect, the value relevance analysis is considered as a joint test of both the relevance and reliability (faithful representation) of accounting information (Barth et al., 2001).

[189] FASB (2008) stated that many investors agree that fair value is their preferred method of reporting the value of financial assets as it is grounded in economic reality; it facilitates informed investment decisions which ultimately strengthen the capital markets. In fact, in a online survey of over 2,000 investors conducted by CFA Institute, an overwhelming majority of respondents (79%) said that fair value accounting improves transparency and contributes to investor understanding about risk.

since the details produced are those regularly reviewed by management; the approach also enhances the integration between internal and external reporting[190] (Gornik-Tomaszewski, 2006).

Although such improvements in FI disclosure provided by Jordanian listed companies happened after the implementation of IFRS 7, evidence from the extant international accounting literature has documented that accounting standards alone do not determine the usefulness of financial reporting (Holthausen, 2009). Instead, there are several forces that affect the quality of financial reporting, and accounting standards should be seen as only one of these influences (Leuz et al., 2003). The forces consist of factors such as regulation and enforcement, culture and other institutional features of the economy (Mueller, 1967; Da Costa et al., 1978; Frank, 1979; Nair and Frank, 1980; Doupnik, 1987; Gray, 1988; Meek and Saudagaran, 1990; Doupnik and Salter, 1995; Nobes, 1998; Gernon and Meek, 2001; Ashraf and Ghani, 2005; Mashayekhi and Mashayekh, 2008). In addition, the extant accounting literature suggests that a country's financial reporting framework, which is represented by the laws and practices that govern financial information disclosure process, has a key role to play in ensuring that companies comply with financial reporting requirements; it affects the level of compliance with mandatory corporate reporting (Tower et al., 1999; Street and Gray, 2001). In this regard, the results of the current study cannot be fully understood without considering the contextual factors affecting financial reporting practices in Jordan.

[190] Commentators on IFSR 7 stated that FI information reported under IFRS 7 would be more reliable as this information was reviewed by the management (Ernst and Young, 2006). However, concerns have been raised about the management approach since it gives the management a great deal of discretion about the information reported (Crawford et al., 2012).

In a similar vein, the pronounced impact of IFRS 7 on FI disclosure documented in the current study could also be due in part to the regulatory reforms which have been introduced by Jordanian governmental bodies (including JSC and ASE) since 1997 such as the Company Law and Securities Act. These Acts mandated that Jordanian listed companies should apply IAS/IFRS when preparing their accounts; they also prescribed the penalties which companies would incur if such laws were violated (e.g. delisting and the imposition of fines). In Jordan, the enforcement of laws has improved since 1997 as the government has sought to make the country an attractive location for foreign direct investment; new economic reforms were introduced, a privatistion programme was launched, the Amman Stock Exchange was established, and the Jordanian economy was opened up to external trade (e.g. the introduction of new foreign investors). Accordingly, the growing level of FI disclosure after IFRS 7 became effective suggests that Jordanian companies may have become more aware of, and willing to comply with, regulation in general, and accounting-related rules in particular.

Culture is one of the most important explanatory variables in disclosure studies (Hofstede, 1987; Gray, 1988, Mashayekhi and Mashayekh, 2008). Hence, the culture of a country may have a strong influence on the way in which people behave (Haniffa and Cooke, 2000). With respect to Jordan, Piro (1998) indicated that secrecy is one of the key characteristics of the Jordanian people which prevents them from talking freely and being more transparent; hence, Jordanian managers' behaviour may be affected by this cultural attribute. In this regard, the relatively low degree of compliance with FI disclosure requirements after IFRS 7 was implemented (52%) may be due to cultural factors such as

prevalence for secrecy among Jordanian managers. This influential characteristic of Jordanian society may have led the management (preparers) of Jordanian listed companies to publish less information about FIs than might have been disclosed in more open societies.

In fact, the IASB principles and standards are designed to introduce accounting standards in the public interest over the globe. Specifically, the IASB stated that "The main aim of the IASB is to develop a set of high quality and enforceable global accounting standards that are in the public interest" (IASB, 2006a, p. 12). Nevertheless, the IASB acknowledged contextual differences from one country to another and promised to overcome this dilemma. In particular, it stated that:

> "Although financial statements may appear similar from country to country, there are differences… probably… caused by a variety of social, economic and legal circumstances and by different countries having in mind the needs of different users… IASB is committed to narrowing these differences by seeking to harmonise regulations … standards and procedures relating to… preparation and presentation of financial statements…harmonisation can best be pursued by focusing on … financial statements… prepared for the purpose of providing information useful in making economic decisions" (IASB, 2006a, p. 32).

In this regard, Gallhofer and Haslam (2007) questioned the IASB's aim of producing standards designed to serve the public interest. They argued that the IASB's formation and development reflect "The socio-economic and political structure substantially allied to Anglo-American constituencies accumulating the major interest in accounting regulation" (p. 659). However, the large number of countries (over 100) which apply IAS/IFRS provides some legitimacy for the IASB's claim (Carmona and Trombetta, 2008)[191]. Ball (2006) argued that there are a number of forces that have improved acceptance of a

[191] IAS/IFRS have gained global acceptance and implementation. Countries using rule-based systems (e.g. Germany) as well as those employing principle-based systems (e.g. the UK) apply IAS/IFRS. At the same time, common law countries (e.g. Australia and New Zealand) and those with a civil-law tradition (e.g Italy and Spain) also implement IAS/IFRS. In addition, countries with diverse national cultures also apply the standards set by the IASB (Ding et al., 2005).

common set of accounting standards; specifically, he indicated that the process of political integration, exemplified by the European Union, as well as the globalisation of financial markets and firms' operations in different jurisdictions around the world are among the driving forces.

In addition, Carmona and Trombetta (2008) have suggested that the distinctive feature of IAS/IFRS is that they are principle-based instead of rule-based. Indeed, principle-based standards refer to fundamental understandings that inform transaction and economic events, hence, these understandings dominate any other rule established in the standard (Nelson, 2003). For example, IFRS 7 states that the amount of information that a company should disclose in its financial statements is determined by the significance of FIs to a firm's financial position and performance. Hence, the extent of information provided about FIs should vary from one company to another. Overall, the global acceptance of IAS/IFRS largely rests on its principle-based nature as well as on its driving notions of openness and flexibility (Carmona and Trombetta, 2008). Indeed, allowing a range of discretion for management in the context of IAS/IFRS is considered one of the rationales for the global acceptance of such standards. This flexibility allows contextual influences of each nation to be involved within financial reporting practices in each country; Jordan is no different.

The results of this chapter provide a great deal of insight for the international (IASB) and national (Jordanian) regulatory bodies about the compliance of Jordanian listed companies with IFRS. First, the results provide implications for international accounting regulators (mainly the IASB) on the implications of disclosure regulation for improving corporate disclosure. Specifically, the findings provide indication to the IASB about the relevance of its accounting standards (including IFRS 7) for a developing country such as Jordan. In addition, the findings could be considered by the IASB when revising accounting standards

in general and IFRS 7 in particular. Second, the results provide timely findings to Jordanian authorities given the current reforms in progress in order to strengthen existing regulations; stringent enforcement mechanisms are needed to ensure full compliance with accounting standards. In addition, the results should provide insights for the JSC and the ASE about the relevance of adopting IFRS by Jordanian listed companies. These insights may also have policy implications for other developing countries that are working hard to improve the quality of financial reporting for their business entities. For example, the findings of the current study could encourage other developing countries that still employ national accounting standards to adopt IAS/IFRS.

6.7 Conclusion

This chapter presents the results of an investigation into FI disclosure practices provided by Jordanian listed companies before and after the implementation of IFRS 7. This analysis covers four main areas, namely: (i) the number of Jordanian listed companies disclosing FI information; (ii) the number of FI-related items disclosed over the two periods; (iii) an industrial analysis of FI disclosure within and across the sectors examined; and (iv) an analysis of narrative reporting in the annual reports pre- and post- the introduction of IFRS 7. The chapter also analysed the narrative reporting made by the accounting preparers pre- and post- the implementation of IFRS 7. In addition, the chapter discussed the findings obtained with the results from the extant literature, theoretical framework adopted and the country context.

Chapter Seven

The Value Relevance of Financial Instruments Disclosure

7.1 Introduction

The previous chapter provided an analysis of FI-related information pre- and post- the implementation of IFRS 7. A sizeable amount of evidence was presented about the significant impact of the introduction of IFRS 7 on the level of FI disclosure provided by Jordanian listed companies[192]. In particular, the sample firms disclosed, on average, 52% of the items included in the disclosure index after IFRS 7 was implemented as compared to 32% beforehand. In addition, the number of companies disclosing FI-related information increased significantly after IFRS 7 became effective. The current chapter aims to examine whether such improved FI disclosure is value relevant. Specifically, this chapter examines the usefulness of FI disclosure by investigating whether market participants (investors) valued this information when making equity pricing decisions. The examination of share price behaviour is thought to be an effective way of studying investors' behaviour as a group to see if accounting information is value relevant (decision useful); is the information capable of making a difference to an investor's decision and is its publication predicted to have a significant relationship with share prices (Ball and Brown, 1968; Amir et al., 1993; Barth et al., 2001).

Although the current investigation concentrates on the value relevance of FI-related information, its results have broader implications for the decision usefulness of IFRS 7's disclosures. In particular, value relevance studies use share prices and/or share returns to infer whether investors consider accounting information to be sufficiently relevant and reliable to be useful in making investment decisions (Maines and Wahlen, 2006). Investors are capital providers and are identified by the IASB as one of the primary users of financial

[192] Expressions used in the context of this chapter such as "FI information" and "FI disclosure" mean the percentage of overall FI-related items disclosed in companies' financial statements.

statements (IASB, 2008a). Value relevance studies are therefore important given that one of the stated goals of financial statements is to provide decision-useful financial information for investors (IASB, 2008a)[193].

The accounting literature is replete with empirical studies on the value relevance of accounting information in both developed and developing countries (e.g. Easton, 1999; Hassan et al., 2009; Al-Akra and Ali, 2012). However, in terms of FI-related information, only a small number of studies exist; they have investigated the association between share prices (market value) and FI-related disclosure (including the numbers provided and narrative information supplied) based upon the introduction of new accounting standards (e.g. Barth et al., 1996; Eccher et al., 1996; Nelson, 1996; Venkatachalam, 1999; Hassan et al., 2006a; Li and Gao, 2007; Song et al., 2010). These studies have tended to concentrate on developed markets and have provided empirical evidence which suggests that FI disclosure is value relevant. However, very few studies have investigated the value relevance of such information in developing countries (Hassan and Mohd-Saleh, 2010).

The current chapter builds upon the previous chapter's findings and provides an analysis of the value relevance of FI-related information. Specifically, the objective of this chapter is to examine the value relevance of FI disclosure for Jordanian listed companies under IFRS 7 as compared to that provided under IAS 30/32[194]. This objective is achieved by examining

[193] Other users of financial statements are also identified by the IASB such as employees, lenders, suppliers, customers and governments; according to the IASB, their needs are met by meeting investors' needs (IASB, 2006; 2008).

[194] The general objective of IFRS 7 is to enhance users' understanding about the importance of FI usage to a firm's financial position and performance. The value relevance of FI disclosure pre- and post- the implementation of IFRS 7 provided by the current study suggested that the information provided the new standard was more value relevant and explained a significant proportion of firm market value; IFRS 7's disclosure requirements were more value relevant.

both the value relevance of the percentage of overall FI-related items disclosed and the sub-categories of FI disclosure; the FI information being examined is drawn from the disclosure index analysis in Chapter 6. This enquiry is motivated by the dramatic development of the Jordanian capital market, the Jordanian accounting system and other economic reforms such as the privatisation programme (see Chapter 2). The remainder of this chapter is organised as follows. Section 7.2 provides an overview of the study sample, the valuation model adopted and the underlying assumptions of the analysis. Section 7.3 outlines the value relevance analysis of the total amount of FI disclosure while Section 7.4 details the value relevance analysis of the sub-components of the total FI disclosure. Section 7.5 discusses the results and provides some implications. Finally, a conclusion to the chapter is provided in section 7.6.

7.2 Study Sample, Valuation Model Employed and Underlying Assumptions

The current chapter investigates the value relevance of FI disclosure for a sample of Jordanian listed companies. This sample comprises the same companies whose financial statements were analysed in the previous chapter. They include 82 financial and non-financial companies. These companies are listed on the first market of the ASE and used by the ASE to compute the general index of the Jordanian stock exchange (ASE, 2008). In addition, the equities of the companies in the sample of the current study are heavily traded— on average, share prices change for these companies' shares on 80% of the days when the exchange is open (ASE, 2008a). In this regard, the sample size is fairly typical for studies of the value relevance of corporate disclosure; for example, in prior studies, the

sample size has ranged from a small number of only 35 companies (Seow and Tam, 2002) to a large number of 1012 firms (Simko, 1999)[195].

In order to perform the value relevance analysis, the current study adopts the valuation model of Ohlson (1995); this model underpins a large body of value relevance studies that have been conducted over the last two decades in both developed and developing countries (e.g. Harris et al., 1994; Barth et al., 1998; Bao and Chow, 1999; Dechow et al., 1999; Francis and Schipper, 1999; Wang et al., 2005; Hellstrom, 2006; Hassan and Mohd-Saleh, 2010; Tsalavoutas and Dionysiou, 2011). The Ohlson model is based upon three fundamental assumptions[196], namely: (i) the value of equity is equal to the present value of expected future dividends; (ii) a clean surplus arises which means that all changes in assets and liabilities, except those relating to dividends, should pass through the income statement; and (iii) the information changes in a linear fashion[197] (Ohlson, 1995).

In developed markets, the information content of reported earnings has been emphasised by accounting studies since the late 1960s (Ball and Brown, 1968; Bowen, 1981). These studies provided evidence about the positive association between share price changes and earnings news. However, Bao and Chow (1999) argued that book value as a component of equity valuation did not attract much interest in the accounting literature until the evolution of Ohlson's model in 1995. Ohlson's (1995) model considers both earnings and book value

[195] The sample used in the current study is comparable to other value relevance studies which have been conducted for both developed and developing markets. For example, sample sizes in previous studies comprised 136 companies for Barth et al. (1996), 133 companies for Nelson (1996), 99 companies for Venkatachalam (1996), 72 companies for Abd-Elsalam (1999, 2003), 39 companies for Jong et al. (2006), 80 companies for Hassan et al. (2009) and 121 companies for Hassan and Mohd-Saleh (2010). Hence, the research sample size employed in the current study seems reasonable.

[196] For further information about these assumptions, the reader is referred to Section 5.6, Chapter 5.

[197] The dynamics specify that date *t+1* expected abnormal earnings are linear in the date *t* abnormal earnings, plus a correction for a scalar variable that represents information other than the accounting data and dividends.

of equity as the major determinants in equity valuation[198]. The linear regression equation of the Ohlson (1995) model yields the following equation:

$$P_{it} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 Earnings_{it} + \varepsilon_{it} \quad [7.1]$$

where P_{it} is the market value of equity at the end of year *t* for firm *i*, BV_{it} is the book value of equity at the end of the year *t* for firm *i*, $Earnings_{it}$ is the earnings for year *t* available to firm *i*'s common shareholders and ε_{it} is a random error term.

Since the market value of equity (the dependent variable) typically exhibits a high level of skewness and kurtosis, a logarithmic transformation was used to reduce the influence of extreme values and to make the distributions of these variables more normal[199] (Deakin, 1976; Bamber, 1987; Lambert and Larcker, 1987; Hassan et al., 2006a; Hassan and Mohd-Saleh, 2010). Thus, the model was modified as follows:

$$L(P_{it}) = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 Earnings_{it} + \varepsilon_{it} \quad [7.2]$$

where L(P*it*) is the natural log of the market value of companies' common equity measured three months following the previous financial year[200], BV_{it} is the book value of equity per share at the end of the year *t* for firm *i*, $Earnings_{it}$ is the earnings per share for year *t* available to firm *i*'s common shareholders and ε_{it} is a random error term.

[198] Recent evidence has reported a steady decline in the value relevance of earnings over time (Ramesh and Thiagarajan, 1995; Lev and Zarowin, 1997). However, there is no consistent evidence that the combined value relevance of earnings and book values has declined over time. Indeed, Collins et al. (1997) pointed out that the combined relevance of earnings and book value has actually increased slightly over the last 40 years; they showed that the value relevance of *"bottom line*" earnings has declined over time, but that the value relevance of book value has increased over the same period.

[199] The results from applying the normality test to the residuals of Equation [7.3] pre- and post- the log transformation; it indicates some improvement in the data distribution.

[200] Market value (*P)* is represented by the number of outstanding shares multiplied by the firm's share price on the last trading day of the three months following the end of the financial year; this date was chosen to ensure that the FI information was in the public domain when the relationship was estimated. The share prices were obtained from Datastream as well as the website of the ASE.

In addition, before estimating the equations developed in this chapter, tests concerning heteroskedasticity and non-linearity were applied to the dataset. Heteroskedasticity often occurs in cross-sectional datasets (Barth et al., 1996). Therefore, the study controlled for the possibility that the variance of the error term might not be constant using White's (1980) procedure[201]; the results indicated that heteroskedasticity was not present in the models examined and there was no material changes were in the results when a White's (1980) heteroskedasticity-consistent standard errors were used. Second, the study applied a non-linearity test of the regression models included in the current chapter[202]; the Ramsey Reset test was used for this purpose. The evidence from this Ramsey Rest test rejected the null hypothesis about the correct specification of the models examined. Specifically, the p-value of the F-statistic was smaller (0.000) than the required level (0.05) and the squared fitted terms were statistically significant with p-values of less than 0.05.

7.3 Value Relevance Analysis of Financial Instruments Disclosure

This section examines the value relevance of FI disclosure pre- and post- the implementation of IFRS 7. In particular, it examines the association between companies' market values and the level of FI disclosure provided in the financial statements; it aims to explore whether such information is value relevant and can explain companies' market

[201] Heteroskedasticity refers to instructions where the variance of the error term is not constant; it occurs when different observations have different error variance; hence, estimated standard errors are inconsistent. It is quite common in regression analysis to have cases where this assumption is violated (Asteriou and Hall, 2006). Thus, White (1980) developed a method of obtaining consistent estimators of the variances and covariances of the OLS estimators; this test estimates heteroscedasticity-consistent standard errors. Therefore, the White's corrected standard errors give a more accurate estimation of the relationship(s) being investigated (Asteriou and Hall, 2006).

[202] One of the most important problems in econometrics relates to the specification of the equation under examination; using an incorrect functional form is one of such specification errors (Asteriou and Hall, 2006). A common speculation error is to assume a linear relationship when the true fundamental form is non-linear in nature.

values. The findings of this examination should support or reject the fourth hypothesis proposed in the current study:

H5: The level of FI disclosure is value relevant and can explain market value

Prior to examining the value relevance of FI disclosure, Equation [7.2] was first examined before any extensions were made for the two periods. This investigation was done in order to see whether the inclusion of an FI disclosure variable was worthwhile. In order to examine the value relevance of FI disclosure, the study extends Ohlson's model in Equation [7.2] to include the percentage of the overall FI-related items disclosed (POFID). The reason for including this variable is to provide evidence about whether or not market participants value FI information when making decisions. In addition, incorporating an FI disclosure variable provides a direct link between company market value and accounting information rather than relying on measures such as earnings (Ball and Brown, 1968) or assumptions of accounting quality based on analysts ratings (Lang et al., 2003). The value relevance of FI disclosure was tested in the two years surrounding the introduction of IFRS 7. Therefore, the study predicts that the level of POFID is more value relevant in the period after the introduction of IFRS 7; more information and different additional details about FI are published in 2007. Including a POFID variable in equation [7.2] yields:

$$L(P_{it}) = \alpha_{0a} + \alpha_{1a} BV_{it} + \alpha_{2a} Earnings_{it} + \alpha_{3a} POFID_{it} + \varepsilon_{it} \quad [7.3a]$$

$$L(P_{it}) = \alpha_{0b} + \alpha_{1b} BV_{it} + \alpha_{2b} Earnings_{it} + \alpha_{3b} POFID_{it} + \varepsilon_{it} \quad [7.3b]$$

where POFID is the percentage of overall FI-related items disclosed in a company's financial statements as measured by Equation [5.2].

Thus, a significant value for coefficient α_3 will indicate that FI disclosure is value relevant and a significantly positive value for the coefficient α_3 would provide evidence about the incremental explanatory power of FI information (Barth, 1994; Venkatachalam, 1996; Simko, 1999). In addition, significant differences between coefficient α_{3a} (pre-IFRS 7) and coefficient α_{3b} (post-IFRS 7) would allow the researcher to ascertain whether FI disclosure has become more/less value-relevant following the adoption of IFRS 7.

Table 7.1 provides descriptive statistics for the variables examined in this chapter; Panel A shows the descriptive statistics pre-IFRS 7, while Panel B provides these statistics post-IFRS 7. A visual inspection of the table illustrates that the mean (median) of the market value of equity (Log P) for the sample firms was JD 10.20 (JD 9.90) pre-IFRS 7 and JD 10.40 (JD 10.10) post IFRS 7 with a low standard deviation (St. Dev) of JD 1.60 over the two periods. In addition, Table 7.1 indicates that the mean (median) of the book value per share (BV) was JD1.47 (JD1.200) before IFRS 7 and JD1.640 (JD1.300) after IFRS 7 was adopted. Further analysis of Table 7.1 reveals that the mean (median) of the earnings variable (earnings per share) was JD0.14 (JD0.10) pre-IFRS 7 and JD0.17 (0.12) post-IFRS 7. However, the minimum value of earnings pre- and post- IFRS 7 was negative indicating that some companies in the sample performed poorly over the two periods of study.

A more detailed scrutiny of Table 7.1 reveals that the mean (median) percentage of the overall number of FI items disclosed (POFID) was 0.32 (0.28) pre-IFRS 7 and 0.52 (0.49) post-IFRS7 indicating a rise in the provision of FI items after IFRS 7 was implemented. The St. Dev of the POFID is quite high suggesting that while some companies complied fully with the accounting standards examined, disclosure of other firms was poor. A further

analysis of the table reveals that the sub-categories of FI disclosure showed a similar trend to that of the POFID. For example, fair value-related items disclosed (FV) had a mean (median) of 0.59 (0.60) pre-IFRS 7 and 0.83 (0.83) post-IFRS 7. The St. Dev value for the FV was relatively stable over the two periods with values of 0.123 pre-IFRS 7 and 0.150 post-IFRS 7. In addition, Table 7.1 indicates that some categories of FI disclosure increased by a sizeable amount after IFRS 7 became effective. For example, balance sheet information went up, on average, from 0.57 before IFRS 7 to 0.78 after IFRS 7 was implemented. On the other hand, the average values for some categories grew slightly after IFRS 7 was adopted; for instance, both hedge accounting (HA) and other disclosures (OD) grew by only 12%. (See Table 7.1 for other categories of FIs).

Table 7.2 reports Pearson and Spearman rank correlation coefficients for the variables examined in the current study; the two measures of correlations were employed because the variables examined included both continuous and categorical data types. In addition, evidence from the descriptive statistics suggested that several of the variables were not normally distributed indicating that the non-parametric Spearman correlation measure might be more appropriate. Panel A shows the correlation coefficients before IFRS 7, while Panel B provides these coefficients after IFRS 7 was implemented. In each panel, the values above the diagonal relates to the Pearson measure of correlation, while the values below the diagonal are the Spearman correlation coefficients.

Table 7.1: Descriptive Statistics for the Variables Examined

Panel A: Pre-IFRS 7					
Variables	**Mean**	**Median**	**St. Dev**	**Min**	**Max**
Log (P)	10.20	9.90	1.60	7.0	15.50
BV	1.47	1.20	0.95	0.14	7.90
Earnings	0.14	0.10	0.20	-0.25	1.10
POFID	0.32	0.28	0.13	0.13	0.70
AP	0.41	0.50	0.19	0.00	100
BS	0.57	0.50	0.15	0.33	0.83
IS	0.38	0.50	0.19	0.17	0.67
HA	0.04	0.00	0.13	0.00	100
FV	0.59	0.60	0.12	0.00	0.80
RI	0.30	0.29	0.35	0.00	100
OD	0.12	0.00	0.07	0.00	0.33
Panel B: Post-IFRS 7					
Log (P)	10.40	10.10	1.60	6.60	15.60
BV	1.64	1.30	1.00	0.58	8.95
Earnings	0.17	0.12	0.25	-0.60	1.40
POFID	0.52	0.49	0.15	0.21	0.85
AP	0.73	0.75	0.24	0.25	100
BS	0.78	0.86	0.15	0.43	100
IS	0.54	0.67	0.23	0.17	100
HA	0.16	0.00	0.28	0.00	100
FV	0.83	0.83	0.15	0.50	100
RI	0.61	0.57	0.24	0.14	100
OD	0.14	0.00	0.22	0.00	0.71

Notes: This table displays descriptive statistics for the variables examined in the current analysis. Log (P) is the Natural Log of Market Value of Equity, BV denotes Book Value of Equity per share, Earnings represents Earnings Per Share, POFID refers to the Percentage of the Overall FI-Related Items Disclosed, AP is Accounting Policies, BS refers to Balance Sheet, IS refers to Income Statement, HA is Hedge Accounting, FV refers to Fair Value, RI is Risk Information and OD refers to Other Disclosures (OD). ST. Dev. is the Standard deviation, Min refers to the minimum and Max refers to the maximum. The unit of measurement for Log (P), BV and Earnings is the Jordanian Dinar.

A visual inspection of Table 7.2 reveals that the majority of variables examined are positively correlated and that there might be a problem of multicollinearity between some variables[203]. Therefore, the study tested for the presence of collinearity when estimating the regression equations by estimating the Variance Inflation Factor (VIF); a value of greater than 10 indicates that a significant amount of collinearity may be present (Sprent and Smeeton, 2007). An analysis of Table 7.2 indicates that the highest correlation was between POFID and RI where the value of R exceeded 0.8 for both the Pearson and Spearman measures over the two periods. This high correlation between POFID and RI is not surprising given that RI is one of the key components of POFID. The table also shows that BV and Earnings were correlated in both periods with a correlation coefficient of between 0.310 and 0.453.

With respect to the sub-categories of FI disclosure, Table 7.2 reveals that all the correlations were positive and the vast majority of them were significantly different from zero. In fact, only three correlations were not significant post-IFRS 7; one of these was related to the RI variable and Earnings where the Pearson correlation of 0.303 was less than the critical value at the 5% level. By contrast, in the top panel for the pre-IFRS 7 year, seven Pearson and five Spearman correlation values were not significantly different from zero. Indeed, most of the high significant correlation values related to the sub-categories of FI disclosure including BS, FV and RI.

[203] Muticollinearity can have a negative effect on the results of a regression, namely: (i) the OLS estimators have large variances and covariances, making precise estimation difficult; (ii) confidence intervals tend to be much wider leading to the acceptance of the null hypothesis more readily; and (iii) the OLS estimators and their standard errors can be sensitive to small changes in the data, hence, the results will not be robust (Paul, 2005).

Table 7.2: Pearson and Spearman Correlation Coefficients for the Variables Examined

	Panel A: Correlation Coefficients Pre-IFRS 7										
	Log (P)	**BV**	**Earnings**	**POFID**	**AP**	**BS**	**IS**	**HA**	**FV**	**RI**	**OD**
Log (P)		0.649*	0.427*	0.564*	0.431*	0.359*	0.422*	0.560*	0.181	0.618*	0.292*
BV	0.541*		0.358*	0.531*	0.395*	0.339	0.416*	0.541*	0.138	0.584*	0.289*
Earnings	0.436*	0.453*		0.373*	0.337*	0.207	0.249*	0.301*	0.067	0.428*	0.089
POFID	0.649*	0.470*	0.341*		0.671*	0.609*	0.705*	0.641*	0.466*	0.876*	0.349**
AP	0.475*	0.444*	0.339*	0.719*		0.446*	0.500*	0.398*	0.294*	0.444*	0.329**
BS	0.402*	0.311*	0.173	0.647*	0.487*		0.172*	0.474*	0.302*	0.478*	0.205**
IS	0.325*	0.240*	0.227*	0.695*	0.502*	0.163		0.507*	0.183	0.504*	0.376**
HA	0.549*	0.637*	0.359*	0.629*	0.527*	0.423*	0.395*		0.309*	0.582*	0.196
FV	0.195	0.240*	0.049	0.464*	0.319*	0.275*	0.192*	0.268*		0.319*	0.344**
RI	0.629*	0.315*	0.325*	0.900*	0.482*	0.492*	0.542*	0.435*	0.320*		0.319**
OD	0.453*	0.617*	0.229	0.521*	0.452*	0.292*	0.343*	0.431*	0.345*	0.385*	
	Panel B: Correlation Coefficients Post-IFRS 7										
Log (P)		0.539*	0.399*	0.642*	0.500*	0.299*	0.498*	0.556*	0.403*	0.458*	0.648**
BV	0.521*		0.310*	0.600*	0.473*	0.259*	0.462*	0.529*	0.346*	0.436*	0.619**
Earnings	0.480*	0.437*		0.403*	0.374*	0.325*	0.320*	0.221*	0.256*	0.303	0.244**
POFID	0.686*	0.359*	0.405*		0.754*	0.580*	0.768*	0.644*	0.667*	0.825*	0.658**
AP	0.500*	0.213*	0.355*	0.729*		0.505*	0.628*	0.376*	0.561*	0.497*	0.421**
BS	0.298*	0.205*	0.215	0.577*	0.483*		0.481*	0.297*	0.448*	0.341*	0.185
IS	0.478*	0.227*	0.287*	0.719*	0.598*	0.487*		0.489*	0.415*	0.478*	0.558**
HA	0.644*	0.475*	0.307*	0.732*	0.432*	0.271*	0.456*		0.356*	0.389*	0.686**
FV	0.385*	0.200*	0.274*	0.661*	0.525*	0.470*	0.387*	0.362*		0.500*	0.289**
RI	0.469*	0.226*	0.319*	0.836*	0.513*	0.368*	0.438*	0.422*	0.539*		0.453**
OD	0.708*	0.435*	0.293*	0.721*	0.445*	0.220*	0.528*	0.755*	0.299*	0.444*	

Notes: This table shows both Pearson and Spearman correlation coefficients for the variables examined in the current analysis. Pearson coefficients are shown in the lower left triangle, while Spearman coefficients are shown in the upper right triangle of each panel. * indicates significance at the 5% level.

Table 7.3 reports the results from estimating Equations [7.2] and [7.3]; Equation [7.2] uses the Ohlson (1995) model to examine the value relevance of BV and Earnings, while Equation [7.3] examines whether the POFID variable is value relevant and provides additional explanatory power beyond the BV and Earnings variables. An analysis of Equation [7.2] in Table 7.3 reveals that both BV and Earnings were significantly associated with share prices (market value) over the two periods; they had positive and significant coefficients of 1.930 and 2.600, respectively (pre-IFRS 7) and 1.730 and 2.070, respectively (post-IFRS 7), with p-values of less than 1%.

The F-statistics testing the joint significance of the two variables rejected the null hypothesis that the two variables do not explain the differences at the 1% level; it had a value of 24.13 pre-IFRS 7 and 21.86 after IFRS 7 was implemented. A visual inspection of the results from Equation [7.2] in Table 7.3 reveals that BV and Earnings jointly explain 36% (pre-IFRS 7) and 33% (post-IFRS 7) of the variation in the companies' market values. Comparing the findings pre- and post- the implementation of IFRS 7 indicates that there was no material impact of IFRS 7's introduction on sample companies' financial positions and performances; there was no negative impact of IFRS 7 on companies' operations given that the coefficients were significantly positive for the two periods. This finding is consistent with the narrative disclosure results provided in Chapter 6 (Section 6.5) where most companies indicated that the new standard had given rise to some additional disclosure about FIs and their associated risks as well as about the restructuring of FIs in the financial statements.

Table 7.3: The Association Between FI-Related Information and Market Value – Regression Analysis

Variables	Panel A: Equation [7.2]							
	Pre-IFRS 7				Post-IFRS 7			
	Coefficient	**t-statistic**	**p-value**	**VIF**	**Coefficient**	**t-statistics**	**p-value**	**VIF**
Intercept	9.700***	63.867	0.000		9.900***	59.320	0.000	
BV	1.930***	2.845	0.005	1.258	1.730***	2.727	0.007	1.237
Earnings	2.600***	4.137	0.000	1.258	2.070***	3.164	0.002	1.237
Adjusted R^2: 0.36 **F-statistic** 24.13***					**Adjusted R^2:** 0.33 **F-statistic** 21.86***			
Variables	**Panel B: Equation [7.3]**							
	Pre-IFRS 7				**Post-IFRS 7**			
Intercept	4.850***	6.592	0.000		1.898	1.501	0.137	
BV	1.230***	2.688	0.008	1.363	1.370***	2.882	0.005	1.269
Earnings	1.933***	3.510	0.000	1.299	1.055	1.605	0.113	1.357
POFID	2.019***	6.780	0.000	1.205	2.521***	6.380	0.000	1.208
Adjusted R^2: 0.56 **F-statistic** 33.70**					**Adjusted R^2:** 0.55 **F-statistic** 31.00***			

Notes: This table shows the results from a regression analysis of a firms' market value on accounting information variables. Log (P) is the natural log of the firms' market value, BV refers to book value of equity per share, earnings indicates earnings per share and POFID is the percentage of overall FI disclosure. Panel A shows the results from a regression of the sample firms' market values on BV and Earnings following Ohlson (1995), while Panel B extends Ohlson (1995) by adding the POFID variable to examine the value relevance of FI disclosure. Book Value of Equity (BV) is measured as the book value of equity per share at the end of the fiscal year, Earnings (E) is measured as the earnings per share and POFID is measured as the percentage of overall number of FI items disclosed by each company. VIF refers to the variance inflation factor. ** indicates significance at the 5% level and *** indicates significance at the 1% level.

Equation [7.3] examines the value relevance of the POFID variable; the result from estimating this equation is reported in Panel B of Table 7.3. A visual inspection of this table reveals that POFID is value relevant; there is a statistically significant relationship between POFID and market value (share prices) over the two periods. In particular, the coefficient of POFID was 2.019 pre-IFRS 7 and 2.521 post-IFRS 7 with p-values of less than 1%. This suggests that market participants viewed FI information as influential news when determining a firm's market value. A comparison of the POFID's coefficients over the test periods indicates that the value is higher post-IFRS 7 (by 0.502) than pre-IFRS 7. The difference between the coefficients pre- and post- IFRS 7 was tested to examine whether it was significantly different from zero. The result indicates that they were statistically significant at the 5% level; it had a p-value of 0.047. This indicates that FI disclosure under IFRS 7 appears to be more value-relevant as compared to that supplied under IAS 32/30.

A further analysis of Panel B of Table 7.3 reveals that BV is also value relevant over the two periods; it had a coefficient of 1.230 pre-IFRS 7 and 1.370 post-IFRS 7 with p-values of less than 1%. Inconsistent results were shown with respect to Earnings; this variable had a coefficient of 1.933 and a p-value of 0.000 pre-IFRS 7, while it had a coefficient of 1.055 with a p-value of 0.113 after IFRS 7 was implemented.

In terms of the explanatory power of Equation [7.3], Table 7.3 indicates that it explains a sizeable part of the sample companies' market values with an adjusted R^2 of 0.56 pre-IFRS 7 and 0.55 post IFRS 7. Comparing the adjusted R^2 from Equations [7.2] and [7.3] can help in determining whether the addition of the POFID variable had a significant impact on the analysis. In particular, the adjusted R^2 of Equation [7.3] is 0.20 higher (pre-IFRS 7) and

0.22 higher (post-IFRS 7) than that of Equation [7.2]. This result suggests that the POFID variable has additional explanatory power for market value.

Panel B of Table 7.3 indicates that the F-statistic for the joint significance of the three variables rejects the null hypothesis that the coefficients are equal to zero; the F-statistic had a value of 33.70 pre-IFRS 7 and 31.00 post-IFRS 7 with p-values of less than 1%. Finally, the reported t-statistic is based on White's (1980) heteroskedasticity-consistent standard error; it rejects the null hypothesis of correct model specification. According to the results presented in Table 7.3, there is support for H4[204].

Overall, the results in Table 7.3 lend support to the general view that the disclosures of additional information are useful for valuing share prices (Miller and Bahnson, 2002). Specifically, Miller and Bahnson (2002) argued that investors are more confident when they have access to additional information, hence, they will be satisfied with lower returns as the risk is reduced, which leads to higher security prices. Nevertheless, Gelb and Zarowin (2002) argued that despite the importance of whether enhanced disclosure makes stock prices more informative about future market value, there is a dearth of empirical evidence about it. Thus, the current study divides the sample firms into two groups (companies with a high level of disclosure and companies with a low level of disclosure) and re-examines the value relevance of FI disclosure (POFID) for both groups of firms. This approach has been adopted in a number of studies (e.g. Gelb and Zarowin, 2002;

[204] In order to find out whether there is any influence of firm characteristics (especially firm size) on the relationship between POFID and firms' market values, the study included some control variables (size, audit firm, sector and leverage) in the equations examined. The results showed no material impacts on the results reported without including such variables confirming that the findings arrived at are not related to omitted control variables.

Taslavoutas and Dionysiou, 2013). For example, Gelb and Zarowin (2002) examined the association between corporate disclosure and stock prices; they supplied empirical evidence for the widely held belief that a greater level of disclosure provided more useful information to investors.

In the current investigation, a company is classified into the high (low) level of disclosure category if it had a disclosure index value higher (lower) than the median percentage for the whole sample[205]. In particular, 46 companies were categorised into the high level of disclosure pre-IFRS 7 and 45 were assigned to this group post-IFRS 7, while 36 companies were placed in the low disclosure group before IFRS 7 and 37 after the new standard became effective[206]. This analysis should help to answer the fifth hypothesis proposed by the current study:

H6: The relative value relevance of FI disclosure is higher for companies exhibiting higher levels of compliance with FI disclosure requirements

Table 7.4 documents the results from the regression of POFID on market value for the two groups (high versus low) before and after the implementation of IFRS 7; Panel A of the table reports the results for companies with a high level of FI disclosure, while Panel B shows the results for companies with a low level of FI disclosure. A visual inspection of Table 7.4 reveals strong evidence that FI disclosure by companies which provided an above-average percentage of FI-related items of information was value relevant (Panel A), while this was not the case for their counterparts in the low level of FI disclosure group

[205] The study also performed this test for the lower and upper quartiles of FI disclosure provided; the results showed no differences as compared to that provided in Table 7.4

[206] Some studies used a dummy variable where 1 is granted if a company has a disclosure level greater the median and 0 otherwise. The current study conducted this test and found no difference in results from those reported in Table 7.4 (results from this test are available in Appendix 7.3).

(Panel B). The coefficient of the POFID variable for companies in Panel A was 3.705 pre-IFRS and 4.417 post-IFRS 7 and both were statistically significant at the 1% level. Indeed, the post-IFRS 7's POFID coefficient was 0.712 greater than that documented pre-IFRS 7 indicating that the implementation of IFRS 7 had a positive impact on the value relevance of the information provided.

An analysis of Panel A of Table 7.4 reveals that the incremental explanatory power of the variables examined increased from 0.51 pre-IFRS 7 to 0.65 post-IFRS 7 for companies with a high level of disclosure. This higher adjusted R^2 value provides additional evidence that enhanced FI disclosure is more strongly associated with share prices. The results in Table 7.4 also reveal that the null hypothesis that the coefficients of the variables examined are equal was rejected at the 1% level.

Table 7.4: Testing the Association Between FI-Related Information and Market Value for Companies with High and Low Levels of Disclosure

Variables	Panel A: Companies With High Level of Disclosures							
	Pre-IFRS 7				Post-IFRS 7			
	Coefficient	t-statistic	p-value	VIF	Coefficient	t-statistic	p-value	VIF
Intercept	0.192	0.127	0.899		-4.662	-1.420	0.162	
BV	6.470	1.655	0.105	1.644	9.880**	2.020	0.049	1.410
Earnings	2.236**	2.282	0.027	1.614	1.300	1.270	0.210	1.296
POFID	3.705***	6.802	0.000	1.336	4.417***	4.745	0.000	1.180
N:46 Adjusted R^2: 0.51 F-statistic: 16.25***					N:45 Adjusted R^2: 0.65 F-statistic: 29.12 ***			
Variables	**Panel B: Companies With Low Level of Disclosures**							
	Pre-IFRS 7				**Post-IFRS 7**			
Intercept	9.65***	11.27	0.000		9.70***	7.240	0.000	
BV	6.780***	6.70	0.000	1.120	4.640***	4.356	0.000	1.101
Earnings	0.540	1.40	0.170	1.158	1.188**	2.390	0.022	1.086
POFID	-0.510	-1.17	0.250	1.046	-0.339	-0.590	0.483	1.126
N:36 Adjusted R^2: 0.070 F-statistic: 8.82***					N:37 Adjusted R^2: 0.048 F-statistic: 5.50***			

Notes: This table presents the results from the association test between FI disclosure and market value. Log (P) is the natural log of the firms' market value, BV refers to book value of equity per share, earnings are earnings per share and POFID is the percentage of overall FI disclosure. Companies are divided into two sets: companies with a high level of disclosure and companies with a low level of disclosure. A company is classified with a high (low) level of disclosure if it achieved a disclosure quantity higher (lower) than the median. The number of companies with a high level of disclosure was 46 before IFRS 7 and 45 firms after IFRS 7, while 36 companies had a low level of disclosure pre-IFRS 7 and 37 post-IFRS 7. *** indicates significance at the 1% level and ** indicates significance at the 5% level.

Panel B of Table 7.4 reports a negative association between POFID and market value over the two periods for companies with a low level of disclosure; the POFID variable had a coefficient of -1.171 pre-IFRS 7 and -0.590 post-IFRS 7. Hence, the null hypothesis that the POFID variable is not different from zero cannot be rejected. These results indicate that a greater level of FI disclosure is more value relevant and can significantly explain companies share prices, while this is not the case for companies with a low disclosure index value. Hence, the results support H5.

7.4 The Value Relevance of Sub-Components of FI Disclosure

An examination of the value relevance of the overall level of FI disclosure does not allow researchers to draw conclusions about the key components of POFID that investors find most useful when making decisions. Indeed, incorporating each category of FI disclosure helps the study to understand users' perceptions of the worth of qualitative and quantitative FI information disclosed in the financial statements (Hassan et al., 2006a). These components are important since they may unmask the risks associated with FI usage and may help investors quantify the future benefits and cost of their investment decisions (Hassan and Mohd-Saleh, 2010). In particular, firms are required by the standards examined in the current study to disclose information on seven categories of FI-related information including both qualitative and quantitative details. However, the market may react differently to these different types of accounting information (Imhoff, 1992). In addition, because of the subjectivity involved in some of the information provided, investors may find some of the data more useful than others. For example, in some cases, users are more interested in qualitative information (i.e. risk information) rather than quantitative information (i.e profit/loss of FI) since the latter may be an assessment which

the user does not have a great deal of confidence in. However, if certain components of information are important for decision-making, it is expected that market participants will value such components when making decisions. Thus, the study also examined the value relevance of the sub-components of FI disclosure. This investigation was conducted in order to allow conclusions to be drawn about the value of certain types of FI information published in the financial statements. Accordingly, the sixth hypothesis in the current study was proposed:

H7: **The relationship between components of FI disclosure and a firm's market value varies from one component to another**

In order to test this hypothesis, Equation [7.4] was developed to investigate the value relevance of the sub-categories of FI disclosure; this yields the following equation:

$$L(P_{it}) = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 Earnings_{it} + \alpha_3 AP_{it} + \alpha_4 BS_{it} + \alpha_5 IS_{it} + \alpha_6 HA_{it} + \alpha_7 FV_{it} + \alpha_8 RI_{it} + \alpha_9 OD_{it} + \varepsilon_{it} \quad [7.4]$$

where AP is Accounting Policies, BS refers to Balance Sheet, IS is the Income Statement, HA refers to Hedge Accounting, FV is Fair Value, RI is Risk Information and OD is Other Disclosures.

When estimating equation [7.4], the problem of multicollinearity arose between the variables as the sub-categories of FI disclosure, which are categorical variables in nature, are significantly correlated. Thus, to examine the possible relationship between firms' market values and the sub-categories of FI disclosure, principal components analysis was employed to identify relevant variables (categories) from the pool of data under consideration[207]. PCA is a method which significantly reduces the number of variables from *p* to a

[207] Principal components analysis (PCA) is a mathematical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components. The number of principal components is less than or equal to the

much smaller set of *k* derived orthogonal variables that retain most of the information in the original *p* variables (Fifield and Power, 2006). The *k* derived variables which maximise the variance accounted for in the original variables are called principal components (PCs). The use of PCA is appealing for a number of reasons. First, it allows a large number of theoretically important factors that may affect the value relevance of FI information to be considered and second, it can be used effectively in conjunction with multiple regression analysis to address the problem of multicollinearity. Specifically, because the *k* derived variables are orthogonal to each other, multicollinearity should not be present. After applying this analysis to the categories of FI disclosure being studied, the dominant PCs were then extracted and used as inputs into a regression analysis in order to assess the value relevance of FI categories included in the study.

The Kaiser criterion was used to decide which PCs to be retained for further analysis. This criterion recommends that only those PCs with latent roots greater than 1, $\lambda = 1$, should be retained. However, Fifield and Power (2006) argued that rigid adoption of Kaiser's criterion may result in discarding PCs, which although small, may be important. They suggested that some variables may not be very well represented by the larger PCs and it may be useful to retain small PCs that better represent those variables. In keeping with this view, Jolliffe (1972) suggested a cut-off point of 0.7 for the eigenvalue. This criterion, in certain instances, results in retaining twice as many components as Kaiser's criterion of $\lambda = 1$ (Dunteman, 1994). Indeed, Fifield and Power (2006) argued that the main aim of PCA is parsimony; the more PCs relative to the number of variables that are retained, the less

number of original variables (Collison et al., 2012). PCA is used in the current study to: (i) reduce the multicollinearity involved among variables examined; (ii) find a small set of linear combination of the covariates which are uncorrelated to each other; and (iii) ensure that the linear combinations chosen have maximal variance.

parsimonious is the description of the data. In order to overcome these problems and to identify which PCs should be retained in this analysis, the Kaiser criterion was relaxed slightly also to include some of those PCs with latent roots slightly below one. In addition, enough PCs were retained so that at least 70% of the variation in the data was accounted for. The adoption of these criteria led to the retention of 3 PCs in all of the sub-categories of FI disclosure in each period.

Table 7.5 summarises the results from applying PCA to the sub-categories of FI disclosure in the study; Panel A presents the results of the first period (pre-IFRS 7), while Panel B provides the results for the second period (post-IFRS 7). In particular, the top part of each panel of the table summarises the factor loadings for the dominant PCs, while the bottom part shows the coefficients. The data in Table 7.5 clearly shows that in all sub-categories examined, the bulk of the variability in the original disclosure categories can be explained by 1 to 3 PCs. For example, Panel A of the table reveals that the eigenvalue (variance) of the first PC is 3.346; it explains 47.8% of the total variance of the seven categories. The second PC has a variance of 0.887 and accounts for 12.7% of the total variance of the seven variables. The third PC has an eigenvalue of 0.802 and accounts for 11.5% of the total variability of the seven sub-categories of FI disclosure. Together, the first 3 PCs accounts for 71.9% of the variance of the seven variables examined. A similar pattern emerges for the remaining 4 PCs examined, but the proportion of variance that they explain is relatively low and their eigenvalues are small.

Table 7.5: Principal Components Analysis of FI Disclosure Categories

	PC1	PC2	PC3	PC4	PC5	PC6	PC7
Panel A: Pre-IFRS 7 Implementation							
Eigenvalue	**3.346**	**0.887**	**0.802**	0.672	0.532	0.470	0.291
Variance	0.478	0.127	0.115	0.095	0.076	0.067	0.042
Cumulative Variance	0.478	0.605	0.719	0.815	0.891	0.968	100
Variables							
Accounting Policies	0.237	0.228	0.133	0.192	0.233	0.163	0.872
Balance Sheet	0.018	**0.934**	0.112	0.100	0.170	0.202	0.189
Income Statement	**0.929**	0.017	0.062	0.132	0.153	0.231	0.198
Hedge Accounting	0.160	0.180	0.101	0.182	0.916	0.148	0.196
Fair value	0.058	0.102	**0.968**	0.141	0.088	0.109	0.102
Risk information	0.269	0.237	0.137	0.148	0.161	0.883	0.158
Other disclosures	0.130	0.100	0.154	0.937	0.171	0.128	0.159
χ^2 of Bartlett's test of Sphericity: 167.5 (0.01)							
Panel B: Post-IFRS 7 Implementation							
Eigenvalue	**3.712**	**1.074**	**0.711**	0.511	0.436	0.356	0.200
Variance	0.530	0.150	0.100	0.075	0.062	0.051	0.032
Cumulative Variance	0.530	0.680	0.780	0.855	0.817	0.868	100
Variables							
Accounting Policies	0.154	0.211	0.206	0.224	0.253	0.868	0.150
Balance Sheet	0.079	**0.934**	0.127	0.195	0.191	0.173	0.042
Income Statement	0.168	0.225	0.158	0.127	0.883	0.242	0.206
Hedge Accounting	0.126	0.092	0.154	0.135	0.158	0.142	0.344
Fair value	**0.887**	0.208	0.232	0.910	0.118	0.196	0.075
Risk information	0.152	0.137	**0.906**	0.237	0.149	0.184	0.156
Other disclosures	0.411	0.043	0.179	0.083	0.224	0.154	0.846
χ^2 of Bartlett's test of Sphericity: 235.4 (0.01)							

Notes: This table shows the results from applying Principal Components Analysis (PCA) to the categories of FI disclosure before and after the implementation of IFRS 7. Emboldened values in the table represent variables with eigenvalues ≥ 0.7 and variables that mainly represent the PCs.

Panel B of Table 7.5 reports the results from applying PCA to the sub-categories of FI disclosure after IFRS 7 was implemented. A visual inspection of this panel reveals that the variability in the original variables (sub-categories) of FI disclosure can also be explained by 1 to 3 PCs. For example, Panel B indicates that the eigenvalue of the first PC is 3.712; it explains 53% of the total variance of the seven variables. The second PC has eigenvalue of 1.074 and accounts for 15% of the total variability of all sub-categories of FI disclosure. The third PC has an eigenvalue of 0.711 and accounts for 10% of the overall variability of the seven variables. Together, these 3 PCs account for 78% of the variance in the categories of FI disclosure. The remaining 4 PCs explain quite a low proportion of variance and their eigenvalues are small.

The values in the bottom half of Panel A of Table 7.5 indicate the factor loadings of the PCs that are identified from the data[208]. In particular, the table highlights the variables that have large coefficients in each PC vector. In the period before implementing IFRS 7, the first PC has a high positive correlation with the *Income Statement* category since the coefficient is 0.929. It also has a positive correlation with *Accounting Polices* and *Risk Information* categories but with relatively low coefficients of 0.237 and 0.269, respectively. The second PC shows a large positive correlation with the *Balance Sheet* category since the coefficient is 0.934, while it shows much lower positive correlation coefficients with both

[208] Rotated factor loadings were used in the current study. Indeed, rotation has been defined as performing arithmetic calculations to obtain a new set of components' loadings from a given set; they have been used in order to maximize the variance explained of the extracted components (McDonald, 1987). There are two types of rotation: (i) the orthogonal rotation where the rotated components are orthogonal to each other and thus, the data believed to be uncorrelated; and (ii) the non-orthogonal (oblique) rotation by which the components are not required to be orthogonal to each other and thus, the data are allowed to be correlated (Vogt, 1998). The first type of rotation was used in the current analysis. It simplifies the component structure and therefore makes its interpretation easier (Cattell, 1978).

the *Accounting Policies* (0.228) and *Risk Information* (0.237) categories. The third PC indicates high positive correlation with the *Fair Value* category with a coefficient of 0.968. It also has a low correlation with *Other Disclosure* (0.156), *Risk Information* (0.137), *Accounting Policies* (0.133) and *Balance Sheet* (0.112) categories.

In terms of the PCs identified for the period after IFRS 7 was implemented, Panel B of Table 7.5 shows that the first PC is dominated by the *Fair Value* category of information with a coefficient of 0.887. It has positive, but smaller, coefficients for both the *Other Disclosures* (0.411) and *Income Statement* (0.168) categories. The second PC is dominated by the *Balance Sheet* category of data with a coefficient of 0.934; the coefficients for the *Accounting Policies* (0.211), *Income Statement* (0.225) and *Fair Value* (0.208) categories were much smaller. Finally, Panel B of the table indicates that the third PC has a large coefficient for the *Risk Information* category of 0.906 and lower coefficients for the *Fair Value* (0.232), *Other Disclosure* (0.179), *Income Statement* (0.158) and *Hedge Accounting* (0.154) categories. Finally, Table 7.5 reports Bartlett's test of Sphericity[209]; a significant value of χ^2 (167.5 and 235.4) at the 1% level was noted over the two periods. This rejects the null hypothesis that variables are unrelated and unsuitable for distillation into PCs.

In the final part of the PCA, the dominant PCs are used as inputs to a regression analysis in order to explain the value relevance of the categories of FIs[210]. Accordingly, two regression

[209] Bartlett's test of sphericity is a test statistic used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$) (Field, 2009).

[210] PCA is subject to a number of limitations. One limitation of the method is that it can often be difficult to interpret the principal components. This situation typically arises when several variables in the PC vectors have large coefficients of either sign (Dunteman, 1994). However, this limitation was not a concern in the current analysis as the identity of the high loading variables in each PC vector was very clear.

models were considered; the first model [7.5] examines the value relevance of the PCs pre-IFRS 7, while the second model [7.6] investigates their value relevance post-IFRS 7; these models yield:

$$L(P_{it}) = \alpha_{0m} + \alpha_{1m} BV_{it} + \alpha_{2m} Earnings_{it} + \alpha_{3m} PC1a_{it} + \alpha_{4m} PC2a_{it} + \alpha_{5m} PC3a_{it} + \varepsilon_{it} \quad [7.5]$$

$$L(P_{it}) = \alpha_{0n} + \alpha_{1n} BV_{it} + \alpha_{2n} Earnings_{it} + \alpha_{3n} PC1b_{it} + \alpha_{4n} PC2b_{it} + \alpha_{5n} PC3b_{it} + \varepsilon_{it} \quad [7.6]$$

Table 7.6: The Association Between the Extracted Principal Components (PCs) and Firms' Market Value

Variables	Coefficient	t-value	p-value	VIF
Panel A: Pre-IFRS 7 – Equation [7.5]				
Intercept	9.906***	65.642	0.000	
BV	4.270	0.823	0.413	1.869
Earnings	1.992***	2.998	0.004	1.327
PC1: Income Statement	0.614***	4.434	0.000	1.277
PC2: Balance Sheet	0.626***	4.557	0.000	1.256
PC3: Fair Value	0.214	1.599	0.114	1.197
Adjusted R^2: 0.54 F-statistic: 20.12***				
Panel B: Post-IFRS 7 – Equation [7.6]				
Intercept	10.134***	70.535	0.000	
BV	7.590**	2.013	0.048	1.431
Earnings	1.189**	2.179	0.032	1.355
PC1: Fair Value	0.855***	6.698	0.000	1.245
PC2: Balance Sheet	0.730***	2.641	0.010	1.050
PC3: Risk Disclosure	0.370***	3.115	0.003	1.077
Adjusted R^2: 0.60 F-statistic: 25.28***				

Notes: This table provides the results from a regression analysis of the PCs extracted from the original categories of FI disclosure and firms' market value. Log (P) is the natural log of the firms' market value, BV refers to book value of equity per share. ** indicates significance at the 5% level and *** indicates significance at the 1% level.

Table 7.6 reports the results from estimating Equations [7.5] and [7.6]. In particular, the table details the coefficient of each PC along with the corresponding t-statistics and p-values. The adjusted R^2 and VIF for the two regressions are also provided. An inspection of Table 7.6 reveals that a significant relationship exists between firm's market value and some of the PCs as well as BV and Earnings over the two periods. Panel A of the table

reports the results before IFRS 7 was adopted; it reveals that two of the PCs are significantly associated with firms' market value, while the third PC is not statistically significant. In particular, the first PC (Income Statement) is statistically significant; it had a coefficient of 0.614 and a p-value of less than 0.01. This suggests that *Income Statement* information is among the important information for investors when making equity valuation decisions. The second PC (Balance Sheet) also has a strong relationship with firms' market value; it had a coefficient of 0.626 and a p-value of less than 0.01. This information, which is related to recognition and measurement of FIs, seems critical for investors to assess the financial position of firm's financial assets and liabilities. Thus, it can be concluded that *Income Statement* (PC1) and *Balance Sheet* (PC2) categories are value relevant (useful) and can explain firms' market value. However, the third PC (Fair Value) shows no significant relationship with firms' market value since the p-value is greater than 0.11.

Panel A of Table 7.6 reveals that the null hypothesis that the coefficients of the variables examined are jointly equal to zero at the 1% level is rejected; the F-statistic is 20.12. In addition, the VIF statistics show no collinearity problem among the variables examined since all the values are less than 10. A further analysis of Panel A in Table 7.6 reveals that Equation [7.5] has a good deal of explanatory power in relation to firms' share prices (market value); it reports an adjusted R^2 of 0.54. Comparing the adjusted R^2 for Equation [7.5] (pre-IFRS 7) with that provided for Equation [7.3] (pre-IFRS 7) reveals a very slight difference; the adjusted R^2 of Equation [7.3] is only 2% higher than that reported in Equation [7.5] (pre-IFRS 7) indicating that the extracted PCs are largely represented in the overall FI disclosure (POFID).

Panel B of Table 7.6 details the results of the association between firms' market values and the PCs as well as the BV and Earnings variables after IFRS 7 was adopted. An analysis of Panel B of the table reveals that all three PCs are value relevant and can explain companies' market values; they have a significant association with firms' market values. Specifically, the first PC (Fair Value) has statistically significant relationship with share prices; it had a coefficient of 0.855 and a p-value of less than 0.01. A comparison between PC1 (Panel B) and PC3 (Panel A) where both mainly represent *Fair Value* information, reveals that fair value information is value relevant (useful) only after IFRS 7 was implemented. In particular, PC3 which mainly represents *Fair Value* information before IFRS 7 was not statistically associated with share prices with a coefficient of 0.214 and a p-value of 0.114; after IFRS 7 became effective this fair value information was significantly different from zero. This result explains the importance of *Fair Value* information which is required to be disclosed under IFRS 7.

A further analysis of Panel B in Table 6.7 reveals that the second PC (Balance Sheet) was strongly associated with firms' market values; it had a coefficient of 0.730 and a p-value of less than 0.01. A comparison between PC2 (Panel A) and PC2 (Panel B) which both mainly represented by *Balance Sheet* information, reveals that although they were both significantly associated with firms' market values, the coefficient of PC2 (post-IFRS 7) is more than twice than its counterparts pre-IFRS 7. This indicates that balance sheet information seems to have become more value relevant after the implementation of IFRS 7. Indeed, IFRS 7 required companies to disclose both the carrying amounts and fair values for all classes of FIs in the balance sheet.

Panel B of Table 7.6 reveals that PC3 is significantly different from zero; it has a strong relationship with companies' market values with a coefficient of 0.370 and a p-value of less than 0.01. This PC mainly represents risk information associated with the usage of FIs. This result explains the significant attention of IFRS 7 on risk information where a single part of its requirements is devoted to risks associated with FIs. In particular, IFRS 7 added new requirements (qualitative and quantitative) about all risks arising from FIs including credit risk, market risk and liquidity risk. Given the statistically significant association between PC3 and firms' market value, it can be concluded that risk information provided under IFRS 7 is useful for investors' decision-making.

A further inspection of Panel B in Table 7.6 reveals that the F-statistic is significantly different from zero; it has a value of 25.286 and a p-value of less than 0.01. Finally, the panel shows that Equation [7.6] has relatively higher explanatory power than Equation [7.5]. Specifically, the equation had an adjusted R^2 of 0.60 which means that these 3 PCs explain a significant part of the variability in companies' share prices. In addition, this adjusted R^2 is 6% higher than that reported in Panel B of Table 7.3 which presents the overall FI disclosure indicating the relevance of PCA for analysing the value relevance of sub-categories of FI disclosure. Hence, H6 is supported.

7.5 Supplemental Sensitivity Analyses

A number of sensitivity tests are conducted to check the robustness of the results presented in Chapter 7. First, the study examines the value relevance of FI disclosure for both financial and non-financial companies separately pre- and post the implementation of IFRS7. Hence, possible bias from the inclusion of both sectors in one regression model is

avoided. The results of this test are reported in Table 7.7. A visual inspection of this table reveals that FI disclosure was value relevant for financial and non-financial companies over the two periods of investigation. In particular, the OPFID variable exhibits positive and significant relationship with firms value for both sectors; while Panel A of Table 7.7 indicates that the OPFID variable had coefficients of 2.021 (pre-IFRS 7) and 2.715 (post-IFRS 7) and p-values of less than 5% for financial firms, Panel B shows that a similar association existed for non-financial firms; specifically, the OPFID variable had coefficients of 1.809 (pre-IFRS 7) and 1.591 (post-IFRS 7) with p-values of less than 5%. In addition, Table 7.7 indicates that the model is quite a good fit for both financial and nonfinancial firms; it explains the sample companies' market values with an adjusted R^2 of over 0.50 for financial and 0.63 for non-financial firms. Finally, Table 7.7 indicates that the F-statistic for the joint significance of the variables rejects the null hypothesis that the coefficients are equal to zero; the F-statistic values for both sectors had p-values of less than 1%. This result provides a great deal of support for the value relevance analysis of FI disclosure provided in the current chapter and indicates that the industry type has no material impact on the relationship between FI disclosure and firm value.

Table 7.7: Testing the Association between FI-Related Information and Market Value for Financial and Non-Financial firms

Variables	Panel A: Financial Firms							
	Pre-IFRS 7				Post-IFRS 7			
	Coefficient	t-statistic	p-value	VIF	Coefficient	t-statistic	p-value	VIF
Intercept	4.837	5.630	0.000		1.255	0.714	0.447	
BV	1.223	4.727	0.007	1.363	1.715	2.758	0.005	1.211
Earnings	1.956	2.796	0.004	1.299	2.237	2.965	0.003	1.356
POFID	2.021	5.742	0.000	1.204	2.715	4.928	0.000	1.119
N: 38 Adjusted R^2: 0.55 F-statistic: 33.500***					N:38Adjusted R^2:0.50 F-statistic: 26.910***			
Variables	**Panel B: Non-Financial Firms**							
	Pre-IFRS 7				Post-IFRS 7			
Intercept	3.884	1.700	0.097		7.358	6.527	0.000	
BV	8.712	5.711	0.000	1.799	1.195	4.727	0.000	1.481
Earnings	0.707	0.923	0.362	1.673	2.569	2.883	0.000	1.337
POFID	1.809	2.434	0.020	1.581	0.770	1.591	0.019	1.325
N: 44 Adjusted-R^2: 0.63 F-statistic: 26.275***					N:44Adjusted-R^2:0.64 F-statistic:26.693***			

Notes: This table presents the results from the association test between FI disclosure and market value for financial and nonfinancial firms. Sample firms consist of 38 financial and 44 non-financial. *** indicates significance at the 1% level and ** indicates significance at the 5% level. N refers to the number of sample firms.

In order to find out whether there is any influence of firm characteristics (especially firm size) on the relationship between POFID and firms' market values, the study included some

control variables (size, profitability, dividends, audit firm, sector and leverage) in the regression model. Table 7.8 reports the results of this test. An analysis of this table reveals that the POFID variable maintains its positive and significant relationship with firm value over the periods of investigation after the inclusion of the control variables, this confirms that the findings arrived at are not related to omitted control variables. In particular, the POFID variable had coefficients of 0.590 (pre-IFRS 7) and 0.368 (post-IFRS 7) and p-values of less 5%. Not surprisingly, the explanatory power of the model increased by about 0.15 when the control variables are added; with these added variables, the model explains over 0.70 of companies' market values. With respect to the control variables, Table 7.8 indicates that both the firm size and auditor choice variables had positive and significant associations with firm value over the two periods of examination; specifically, they had coefficients of 0.992 and 1.056 pre-IFRS 7 and 0.969 and 0. 971 post-IFRS 7 with p-vales of less than 0.05. Other control variables had no significant relationship with companies' market values (see Table 7.8). In addition, Table 7.8 indicates that the F-statistics for the joint significance of the variables rejected the null hypothesis that the coefficients are equal to zero; the F-statistic values of the model had p-values of less than 1%. Overall, the results of the sensitivity analyses (Table 7.7 and 7.8) provide support for the analysis presented in this chapter which adds an element of robustness to the overall findings.

Table 7.8: The Association Between FI Disclosure and Firms' Market Value Including Firm Characteristics

Variables	Coefficient	t-value	p-value	VIF
Panel A: Pre-IFRS 7				
Intercept	7.882	7.980	0.000	
BV	8.860	2.330	0.023	1.458
Earnings	1.624	3.017	0.004	1.340
POFID	0.590	1.650	0.035	3.110
Size	0.992	6.175	0.000	2.711
Sector	0.128	1.041	0.301	1.770
Auditor	1.056	2.501	0.015	0.245
Leverage	-0.100	-0.210	0.990	0.695
Dividends	0.663	1.837	0.070	0.319
Adjusted R^2: 0.70 F-statistic: 24.812***				
Panel B: Post-IFRS 7				
Intercept	6.854	4.338	0.000	
BV	7.758	2.371	0.020	1.474
Earnings	0.930	1.964	0.050	1.423
POFID	0.368	0.704	0.045	2.783
Size	0.969	6.781	0.000	2.193
Sector	0.109	0.884	0.380	1.822
Auditor	0.971	2.139	0.036	4.820
Leverage	0.300	0.796	0.739	1.440
Dividends	0.721	2.001	0.050	3.195
Adjusted R^2: 0.71 F-statistic: 25.489***				

Notes: This table provides the results from a regression analysis of the relationship between FI disclosure and firms' market value including firm characteristics. BV refers to book value of equity per share, earnings was measured by EPS, POFID is the overall percentage of financial instruments disclosure, firm size was measured by total assets, auditor refers to whether the auditor is from the Big Four or not, sector indicates the industrial sector of the sample: banking, financial services, service and manufacturing companies, leverage is measured as the total debt to total assets and Dividends are measured as a dummy variable which is 1 if the company had dividends and 0 otherwise.

7.6 Discussion and Implications of the Results

This chapter outlines the results from the value relevance analysis of FI disclosure. In particular, three main findings emerge from this examination. First, evidence was provided that FI disclosure was value relevant over the two periods of investigation. Specifically, the overall percentage of FI-related information provided by Jordanian listed companies had a significant relationship with firm market value pre- and post- the implementation of IFRS 7. In addition, evidence was provided that FI-related information provided under IFRS 7 was more value relevant (useful) compared to that supplied under IAS 30/32. The vast majority of previous studies on the value relevance of FI disclosure arrived at similar results (Barth et al., 1996; Eccher et al., 1996; Nelson, 1996; Simko, 1999; Venkatachalam, 1999; Seow and Tam, 2002; Hassan et al., 2006a; Li and Gao, 2007; Song et al., 2010; Hassan and Mohd-Saleh, 2010)[211]. For example, Barth et al. (1996) investigated the value relevance of FI information pre- and post- the implementation of SFAS 107; although the study found that FI-related disclosures were value relevant over the two periods, information provided under SFAS 107 had a stronger relationship with firms' market values. In another example, Hassan and Mohd-Saleh (2010) also obtained similar results; they examined the value relevance of FI disclosure provided by Malaysian listed firms before and after the introduction of MASB24 (similar to IAS 32) and found that the FI-related information supplied was value relevant after the new pronouncements became effective where this was not the case beforehand. In addition, the current analysis indicated that FI disclosure provided extra explanatory power beyond book value of equity and

[211] In general, the current study's findings are consistent with the extant literature of market-based accounting research that has provided evidence about the appropriateness of capital market measures (share prices) in the assessment of the usefulness of accounting information (Ball and Brown, 1968; Amir et al., 1993; Easton, 1999; Gelb and Zarowin, 2002; Hassan et al., 2009). These studies ascertained that once accounting information has been made publicly available, the impact of such information is reflected in companies' market values.

earnings; specifically, the model explained 56% (pre-IFRS 7) and 55% (post-IFRS 7) of the firm market value. The extant literature has documented consistent figures about the explanatory power of FI disclosure. For example, Barth et al. (1996) found that FI disclosure explained quite a large proportion of market value with an adjusted R^2 of 75% pre-SFAS 107 and 73% post-SFAS 107. In another instance, Hassan and Mohd-Saleh (2010) documented a lower value for the adjusted R^2 of only 22%. The results of the current study reiterate the finding that market participants (mainly investors) value FI-related information when making investment decisions.

Second, the present investigation indicated that the level of FI disclosure provided was value relevant and could explain firms' market values. In particular, the study examined the value relevance of companies with a high versus a low level of disclosure; the results indicated that companies which disclosed a higher level of FI-related items was value relevant, while this was not the case for companies that published a lower level of information indicating that investors value companies with a higher level of FI disclosure when assessing equity prices. These results are consistent with Tsalavoutas and Dionysiou (2012) who investigated the value relevance of implementing IFRS standards for a sample of Greek listed companies. They divided their sample into two groups based on the level of disclosure; the results indicated that value relevance of companies with a higher level of disclosure was significantly higher than that of companies with a lower level of disclosure. Other studies have arrived at similar findings (e.g. Welker, 1995; Gelb and Zarowin, 2002). This finding suggests that the level of FI information matters when making economic decisions. The value relevance analysis for companies with a high versus a low level of FI disclosure revealed that users of information (mainly investors) valued companies that

disclosed greater levels of information. In addition to providing evidence about the relevance of such information, the analysis provides support for the widely held belief that increases in the quantity of information implies improvement in the usefulness of such information. In particular, Ijiri (1983) argued that, under a decision usefulness approach, more information is always preferred to less as long as it is cost effective" (p. 75).

Third, the principal components analysis (PCA) of sub-categories of FI disclosure revealed three PCs for each period which had eigenvalues greater than 0.7 and explained over 70% of the total variability in the variables examined. These PCs are represented by Balance Sheet, Income Statement and Fair Value information (pre-IFRS 7) and Balance Sheet, Fair Value and Risk Information (post-IFRS 7). It is quite clear that both Balance Sheet and Fair Value categories have maintained their importance over the two periods. On the other hand, Income Statement information appears to be less crucial for investors after IFRS 7 became effective. This reflects the new approach[212] of the IASB to making the balance sheet the key document among the financial statements in the annual reports where it should include both the carrying amounts and fair values of FIs (Bradbury, 2003; Whittington, 2008a); hence, investors can estimate gains or losses on FIs without looking at the income statement figures. As a result, the income statement may have become a secondary document as compared to the balance sheet under the new approach of the IASB. Another reason for this result could be that users of accounting information have long been used to

[212] The 2006 conceptual framework of the IASB has concentrated on the definition of the two basic elements (assets and liabilities), while other elements such as equity, income and expenses have not been addressed. Whittington (2008a) has argued that by concentrating on assets and liabilities, the IASB is reaffirming the so-called 'balance sheet' approach that is embedded in its existing conceptual framework - making the balance sheet the main document among the financial statements.

seeing Income Statement information which was required by IAS 39 since 1998; such disclosures have remained unchanged under IFRS 7 (Black and White, 2003; Lara and Mora, 2004). Hence, the Income Statement may provide no additional important information compared to that provided in the balance sheet. Instead, Risk Information became a key component of FI information after IFRS 7 was introduced. This finding reflects the new approach of IFRS 7 which emphasises risk information associated with FIs; the new standard devotes a significant part of its requirements to mandating disclosures related to risk arising from FI usage including both quantitative and qualitative disclosures (IASB, 2006). In particular, IFRS 7 requires companies to publish information about risks associated with FI usage including credit risk, market risk and liquidity risk. In addition, the introduction of IFRS 7 may have sorted out one of the major criticisms of the conceptual framework of accounting for FIs. In particular, Bradbury (2003) argued that one of the underlying weaknesses of the conceptual framework in relation to FIs is that it almost ignored risk arising from the usage of such instruments which are very critical in determining a firm's financial position and performance. Finally, in Jordan investors primarily consist of large institutions who are both debt and equity providers (Al-Akra and Ali, 2012). Hence, Income Statement disclosures may not provide the information needed by those investors; the information which such investors require is available in the balance sheet (e.g. FIs and their fair values).

The PCs that were extracted by PCA were used as inputs in a regression in order to examine their value relevance. The results indicated that: (i) balance sheet information had a significant association with firm market value over two periods (ii) income statement information was value relevant under IAS 30/32, while it was dropped out of the model

post the implementation of IFRS 7 due to the decline in its importance; (iii) fair value information had a significant relationship with market value under IFRS 7, while this was not so under IAS 30/32; and (iv) risk information had a statistically association with equity market values under IFRS 7. The findings indicated that Balance sheet information was value relevant before and after implementing IFRS 7 reiterating the importance of such information for market participants. In addition, Fair Value information was value relevant but only after IFRS 7 was implemented; this result reflects the importance of the comparative fair value of FIs which now has to be disclosed in the balance sheet under IFRS 7. The value relevance of Balance Sheet and Fair Value information arrived at in the current study is consistent with the IASB perspective which places a great deal of emphasis on these components of FI information. Indeed, IFRS 7 requires companies to show all FIs (derivative and non-derivative) in the balance sheet by both the carrying amounts and fair values (IASB, 2006). Moreover, Risk Information was value relevant after IFRS 7 was introduced; this reflects the significance of risk information required under IFRS 7. As discussed earlier in this chapter, qualitative and quantitative disclosures about all risk arising from FIs are required to be published under IFRS 7; this includes credit risk, market risk and liquidity risk.

The extant literature on the value relevance of the sub-components of FI disclosure documented mixed results. For example, Hassan and Mohd-Saleh (2010) examined the value relevance of individual disclosure categories of FI provided by Malaysian listed companies; the study found that only risk and hedge information was value relevant. However, their study ignored the high correlation among the sub-categories of FI disclosure when doing their regression analysis, hence, different results might have emerged if this

problem had been addressed. In another example, Hassan et al. (2006a) examined the value relevance of FI disclosures provided by Australian extractive companies and found that fair value information about FIs was value relevant. Indeed, fair value information about FIs seems to be value relevant across most studies that have investigated this issue (Simko, 1999; Venkatachalam, 1999; Seow and Tam, 2002; Hassan et al., 2006; Li and Gao, 2007; Song et al., 2010).

The decision usefulness approach was selected as the theoretical framework underpinning the current investigation. In particular, the notion that financial accounting and reporting should provide useful information for investment decisions has largely underpinned most of the accounting standards issued by the IASB since its establishment in the early 1970s. In this regard, both accounting regulators (including the IASB and FASB) and the extant accounting literature agree that relevance and reliability are the basic characteristics of useful accounting information (Barth et al., 2001; FASB, 2006; IASB, 2006; 2008; 2010[213]). For example, Sloan (1999) argued that relevant information should be capable of making a difference in user decisions while reliable information should be representationally faithful, verifiable and neutral. In this regard, Barth et al. (2001) indicated that value relevance analysis is generally a joint test of both relevance and reliability of financial statement information; they argued that value relevance research attempts to operationalise key dimensions of the accounting regulators' stated theoretical

[213] The 2010 conceptual framework of the IASB restructured the qualitative characteristics of accounting information as follows: (i) the fundamental qualitative characteristics which comprise relevance and faithful representation; (ii) the enhancing qualitative characteristics which consist of comparability, timeliness, verifiability and understandability; and (iii) a pervasive characteristic which includes the cost constraint.

framework to assess the relevance and reliability of accounting information. In keeping with this notion, the findings obtained from the present study which point to the value relevance of FI disclosure provided by Jordanian listed companies provide support for the standards based on the objectives of the conceptual framework adopted; it suggests that FI disclosure is useful in the decision-making process. This result is in line with a large body of MBAR which has investigated the usefulness of accounting information across a range of accounting topics (Ball and Brown, 1968; Archibald, 1972; Ball, 1972; Staubus, 1976; Barth, et al., 1996; Venkatachalam, 1996; Hassan et al., 2006a; Li and Gao, 2007; Hassan and Mohd-Saleh, 2010).

Market prices are usually affected by many factors including accounting information (Barth et al., 2000). In addition, the institutional background of the country can play a key role in the capital market response to financial statement data (Sloan, 1999). In this regard, the market reaction to the FI disclosure documented in the current study can also be partially interpreted within the context of the country where IFRS 7 is being implemented. In particular, Jordan has witnessed a dramatic level of development over recent years including economic liberalisation (with the adoption of an open market approach), legislative reforms (e.g. Company Act, Securities Act, and Accounting Profession Act), the launch of a privatisation programme, the establishment of the Amman Stock Market and the adoption of IAS/IFRS. Accordingly, the legal system of the country has shifted towards a common law approach (Al-Akra et al., 2009), investor protection has improved (La Porta et al., 1999; 2000) and the capital market has become more important to companies as a source of financing (Omary, 2010). In addition, the economic reforms have attracted sizeable foreign investments into the Jordanian economy in general, and to the capital

market in particular (Omar and Simon, 2011). Foreign investors, who are mainly from developed countries, expect a similar level of accounting information (e.g. quantity, quality and timeliness) about their investment as compared to that provided in their home countries (Mardini, 2012). This expectation has put pressure on Jordanian listed companies (accounting preparers) to publish a satisfactory level of information in a timely fashion in order to meet the needs of such investors; thus, share prices in the capital market may have begun to respond to such disclosures (Al-Akra and Ali, 2012). In addition, empirical evidence suggests that the Jordanian capital market is relatively efficient (Lagoarde-Segot and Lucey, 2005; Smith, 2007); hence, the publicly available information tends to be reflected in companies' share prices information. Overall, the results support the notion that environmental factors such as economic circumstances as well as the adoption of international standards (IAS/IFRS) in a developing market like Jordan can enhance corporate disclosure and, hence, increase firm value.

The results of the current study have a number of implications for policy-makers. First, they provide a great deal of insight for the IASB into how the capital market perceives the information provided under new accounting standards such as IFRS 7. This insight may help the IASB when refining its standards. Given the Anglo-American perspective which dominates the IAS/IFRS (Gallhofer and Haslam, 2007), the current results provide valuable insights about the acceptance of, and the reaction to such standards for a developing country such as Jordan with different contextual and institutional settings. In addition, the findings provide valuable insights for policy-makers in Jordan who are concerned about the implications of mandatory disclosures. For example, given the value relevance of FI disclosure documented in the current study, regulatory bodies should ensure that all listed companies' financial statements are made public in a timely fashion so that new

information can be reflected in the market value of the firm. Moreover, the findings of the present study should provide some insights for the ASE about the efficiency of the Exchange; specifically, this provides valuable information for the ASE about how the capital market reacts to new information published. Finally, given the economic and legislative reforms that Jordan has embarked upon, the findings provide some clues about how the Jordanian investment environment is developing; in particular, more detailed information about Jordanian companies' operations and performances could enhance investor's confidence when making decisions which in turn should increase the value of the firm.

7.7 Conclusion

This chapter reports the results from examining the value relevance (usefulness) of FI disclosure provided by Jordanian listed companies pre- and post- the implementation of IFRS 7. The current study adopts the valuation model of Ohlson (1995) in order to perform this analysis. In general, the current study provides evidence about the usefulness of the implementation of IFRS 7 by Jordanian listed companies. In particular, the findings indicate that the level of FI disclosure was significantly and positively related to market value. This result suggests that compliance with IFRS mandatory disclosure requirements does produce relevant (useful) financial statements which mitigate uncertainties about companies' fundamentals; hence, they influence investors' investment decisions.

Chapter Eight

Synopsis and Conclusion

8.1 Introduction

The FI disclosure project of the IASB was precipitated by several well-known enterprises suffering significant losses from using complex financial products. The emergence of new and more complex FIs created a problem for existing financial reporting practices (Dunne, 2003). In particular, Barth (2004) argued that these instruments caused standard-setters striving to use the same measurement and disclosure attributes for all financial assets and liabilities; she suggested that attempts to sort out the problem associated with the measurement and reporting of financial assets and liabilities was one of the driving forces behind the increased use of fair value accounting; hence, accounting standard-setters continued up-dating their pronouncements about FIs. Thus, accounting bodies throughout the world including the IASB have sought to update their FI-related disclosure requirements by introducing new standards in the area. From the IASB's point view, FIs and their associated risks were poorly addressed in corporate annual reports prior to the introduction of IFRS 7; this gap in disclosure requirements was thus a source of risk for stakeholders (mainly investors) who were often unaware that such products were being employed by a company. IFRS 7 has been formulated to fill in this gap; it has sought to provide a more comprehensive disclosure framework for dealing with FIs and the risks arising from the use of these financial products.

The primary objective of this study was to investigate the impact of IFRS 7 on FI reporting practices for Jordanian listed companies. In addition, it has sought to examine the effect of IFRS 7 on the stock market's response to FI disclosure from a decision usefulness perspective. In particular, the study examines (i) the extent of all FI-related information provided under IFRS 7 as compared to that supplied under the previous standards (IAS

30/32); and (ii) the value relevance (usefulness) of FI-related disclosure over the two periods. An assessment of the impact of IFRS 7 on FI disclosure practices was facilitated by an examination of corporate annual reports before and after the implementation of the new standard. The financial statements for different-sized firms drawn from a wide variety of sectors were consulted to evaluate the impact of the standard on a diverse mix of companies. Once this part of the analysis was completed, the value relevance of the pre- and post- IFRS 7 FI information was examined in order to assess the usefulness of such data to capital market participants. In general, the evidence suggests that the implementation of IFRS 7 had a positive influence on the percentage of FI-related information provided by Jordanian listed companies in the financial statements as the number of items disclosed about FIs increased. In addition, the evidence suggests that most of the FI-related information provided was seen as value relevant by capital market participants.

This chapter provides a conclusion to the current thesis. The conclusion is drawn from the empirical findings which were presented in Chapters 6 and 7. These findings are interpreted within a Jordanian context drawing on the background outlined in Chapter 2. They are also analysed within the context of results documented in the extant literature as summarised in Chapter 3. The remainder of this chapter is organised as follows. Section 8.2 provides a summary of the results from the current thesis. Section 8.3 presents the main findings which have emerged from the current study; these findings are related back to the research hypotheses proposed in the current thesis. Section 8.4 outlines the limitations of the current research and provides a number of suggestions for future research.

8.2 Summary of the Study

This thesis comprises eight chapters. Chapter 1 outlined the motivations underpinning the current research and discussed the importance of the study; it sought to help the reader to understand the reasons for undertaking the work as well as providing a framework for the reader to comprehend the findings that have emerged. It also summarised the study's conceptual framework underpinning the analysis and outlined the research methodology and methods adopted in the current study. The chapter then outlined the research objectives and described the contribution made by the current thesis. Chapter 2 presented an overview of the regulatory environment within which Jordanian listed companies operate. The chapter provided details about the historical development of accounting regulation and the factors affecting the accounting system in Jordan. Specifically, the political system, level of economic development, the Jordanian capital market, the legal system, the accounting profession, the taxation system and the culture of the country were discussed insofar as these factors influenced the issues under investigation.

Chapter 3 reviewed the extant relevant literature on FI disclosure. In particular, the chapter surveyed the literature in four areas, namely: (i) the corporate usage of FIs; (ii) FI disclosure practices; (iii) risk disclosure associated with FIs; and (iv) the value relevance of FI disclosure. In addition, the chapter discussed the content of various FI-related standards which have been issued by different accounting standard-setting bodies e.g. FASB, the IASB and the ASB.

Chapter 4 outlined the theoretical framework (decision usefulness) that underpins the current study about FI disclosure. The chapter then detailed the development of decision

usefulness theory in the extant literature as well as the widespread adoption of the theory by the major accounting standard-setters. In addition, the chapter provided justifications for the adoption of this theory in the current thesis.

Chapter 5 discussed the research paradigm, methodology and methods employed in the present investigation. In particular, the current thesis uses a functionalist methodological approach to explain the choice of the research topic, justify the focus on FI disclosure and outline the reasoning behind the investigation of value relevance. The philosophical assumptions of the research pointed towards the use of quantitative methods of investigation. To this end, the study used two principal research methods: (i) the disclosure index analysis applied to 164 annual reports both before and after the implementation of IFRS 7; and (ii) an analysis of the impact of FI disclosure on share prices. The investigation employed information from sources such as corporate annual reports, ASE and Datastream. The aim was to: (i) provide a descriptive account of FI-related disclosures; it sought to examine whether the amount of such disclosures has changed following the implementation of IFRS 7; and (ii) examine the value relevance (usefulness) of FI disclosure before and after the implementation of the new standard. Therefore, the study is positive (quantitative) in nature and focuses on hypothesis testing. The chapter outlined the two research methods employed by the current study, the disclosure index technique and the valuation model of Ohlson (1995). A description of both of these methods was provided in Chapter 5.

Chapter 6 presented the results of the disclosure index analysis of the annual reports for 82 Jordanian listed companies before and after the implementation of IFRS 7. Specifically, the level of FI-related information disclosed in the financial statements of Jordanian companies

in 2006 under IAS 30/32 was compared with that provided in 2007 under IFRS 7. The findings of this analysis suggested that the implementation of IFRS 7 had a significant impact on the percentage of FI-related items disclosed in the annual reports as well as the proportion of companies supplying FI information; both measures increased significantly. An industrial analysis of FI disclosure indicated that the number of FI-related items disclosed increased both within and across sectors.

Chapter 7 details the results from examining the value relevance (usefulness) of FI disclosure provided over the two periods; this examination was conducted for both the percentage of the overall FI-related information and the sub-categories of FI disclosures. In particular, although FI-related information was value relevant over the two periods, information provided under IFRS 7 seemed to be more useful in that its publication was associated with a bigger stock market impact. In addition, new disclosures mandated under IFRS 7 were seen to be significantly associated with share prices.

8.3 Main Findings

This section of the chapter summarises the main findings of the two strands of the empirical work conducted in the current study, namely, the disclosure index and the value relevance analysis. In general, the implementation of IFRS 7 had a significant and sizeable impact on the FI disclosure practices of Jordanian listed companies in their 2007 annual reports. In particular, six main findings emerge from this dissertation. First, the number of Jordanian listed companies disclosing FI-related items increased significantly; results reported in Chapter 6 (Table 6.1, 6.2 and 6.3) revealed that a larger number of companies disclosed more disaggregated FI-related items after IFRS 7 was implemented. Specifically, a sizeable

number of companies started disclosing items which were mandated previously under IAS 30/32 as well as publishing new information required by IFRS 7. This increase was statistically significant; it ranged from only 1 firm for items 12, 27 and 38 to 72 firms for item 11. These findings supported the first hypothesis proposed by the current study which stated that: the proportion of Jordanian listed companies disclosing FI disclosure has increased significantly following the introduction of IFRS 7. The new standard seems to have increased awareness among companies that FI-related disclosures were required; whereas compliance with IAS 30/32 had been less than fulsome. A similar conclusion was reached about the impact of IFRS 8 in Jordan by Mardini (2012). Specifically, he documented that the information of a new accounting standard seemed to propel companies in disclosing segmental information which had previously been mandated under IAS 14R but which had not previously been published. The publicity surrounding the implementation of the new standard may have caused companies to re-evaluate the FI information which they supplied in the annual reports.

Second, the number of FI-related items disclosed by Jordanian listed companies increased significantly after the introduction of IFRS 7 (Table 6.4). In particular, the number of items disclosed rose from a median (mean) of 11.00 (12.82) pre-IFRS 7 to 26.00 (27.13) post the implementation of IFRS 7. This pattern of an increased provision for FI-related items was uniform across all the seven sub-categories of FI disclosure: namely, *Accounting Policies, Balance Sheet, Income Statement, Hedge Accounting, Fair Value, Risk Information and Other Disclosures*. Specifically, *Balance Sheet* and *Risk Information* categories accounted for the largest change; their median values of 3.40 and 2.12 items pre-IFRS 7 rose to 5.45 and 8.54 items after IFRS 7 was implemented. The smallest change was associated with the

categories of *Other Disclosures, Liquidity Risk* and *Hedge Accounting*; they had an average difference average of 0.70, 0.82 and 0.91 items being published in 2007 relative to 2006 respectively. These results lend support to the second hypothesis proposed by the current study which stated that: The level of FI disclosure has increased significantly following the introduction of IFRS 7 compared to information provided previously by Jordanian listed companies. This result is consistent with the extant accounting literature which has found that the implementation of new accounting standards concerning FIs resulted in a significant increase in the FI-related information in companies' financial statements (Berkman et al., 1997; Roulstone, 1999; Chalmers, 2001; Hamlen and Largay, 2005; Hassan et al., 2006; Bischof, 2009).

Third, a sectoral analysis of FI disclosures revealed that the impact of the implementation of IFRS 7 was pronounced across all industries. In particular, the percentage of FI-related items disclosed increased significantly within and across the four industry-groupings examined - banks, financial services, services and manufacturing. On average, Jordanian listed companies provided 52% of required FI-related items after IFRS 7 became effective as compared to 32% beforehand. A further analysis of the results revealed that banks' disclosures were significantly different from that of the other three sectors; banks recorded the highest percentage change of FI-related items, on average 23%; it grew from 52% of items pre-IFRS 7 to 75% after IFRS 7 became effective. This result is consistent with the extant corporate disclosure literature which pointed out that banks tend to provided larger volume of information as compared to other sectors presumably because banks usually employ the most sophisticated information systems, typically have enough resources to produce the information required and usually hire auditors from the big four firms (Owusu-

Anash, 1998; Hossain, 2000; Akhtaruddin, 2005). This increase was present across all the sub-categories of FI disclosure examined, but varied from one category to another. For example, the largest change in Banks' disclosures was in the *Hedge Accounting* area which grew by 47% after IFRS 7 was implemented. Other sectors' disclosure also increased; the services and manufacturing sectors' percentage of items disclosed rose by 18%, while financial services industry's disclosure of items increased by 21%. This finding suggests the notion that IFRS 7 may have encouraged companies to supply decision-useful information; if banks are the biggest "users" of FI products, it seems sensible that their disclosures under IFRS 7 should have increased by the largest amount if useful information is being provided to investors and other stakeholders.

A number of other consistent findings were documented both within and across the four sectors regarding the different sub-categories of FI disclosure. For instance, no significant differences were noted regarding *Balance Sheet* and *Fair Value* categories of FI disclosure within each sector and across the various industries after the adoption of IFRS 7; by contrast, statistically different results were noted before the new standard was issued. This finding of greater consistency suggests that the implementation of IFRS 7 may have enhanced the *comparability* of the financial statements; such comparability may have been useful for users. This is not unexpected since the main aim of financial statements produced in accordance with the IASB's conceptual framework is to provide information that is useful to users of such statements for decision making purposes (IASC, 1989; 2006; 2008; 2010). Specifically, the results of the current research suggest that IFRS 7 was successful in this regard. According to the results presented in Chapter 6, an objective of the standard setter seems to have been achieved with the adoption of IFRS 7 in Jordan; the users of the

annual reports were provided with more and new information about companies' usage of FIs which may have been useful. These results lend some support to the third hypothesis proposed by the current study which stated that: there are significant differences in FI disclosures by Jordanian listed companies within and across sectors.

The dramatic increase in the level of compliance with IFRS 7 indicates a transformation in the attitudes of executives at Jordanian listed companies; for compliance to increase from a very low level to the provision of a sizeable amount of disaggregated FI-related information, the publicity surrounding the introduction of the new standard may have encouraged management to treat this topic seriously. This change in the level of compliance may have arisen because of publicity about the new standard from the JSC; this body wanted to show that Jordanian companies were in the lead in terms of compliance with new standards from the IASB in order to attract new (mainly foreign) investors into the Jordan economy. In addition, IFRS 7 may have had an impact on the internal reports of Jordanian companies because of the perceived demand for such disclosures among potential investors. As new (and possibly more sophisticated) foreign investors took equity stakes in Jordanian companies, accounting preparers may have increased disclosure to levels which such investors might have been used to in their home country.

Fourth, the evidence in Chapter 7 revealed that FI-related disclosure provided by Jordanian listed companies was value relevant (useful) over the two periods. In particular, investors valued FI-related information when making investment decisions. The valuation analysis revealed a significant positive relationship between the percentage of FI-related items disclosed and companies' share prices (Table 7.3). Although FI disclosure was value

relevant over the two periods, the analysis in Chapter 7 indicated that information provided by Jordanian listed companies under IFRS 7 was more value relevant (more useful) than that provided under IAS 30/32. Specifically, the difference between the post-IFRS 7 coefficient and pre-IFRS 7 coefficient of the percentage of FI disclosure was positive and significantly different from zero. This finding supports the fourth hypothesis proposed: the level of FI information is value relevant and can explain share prices. The extant literature on the value relevance of accounting information considered value relevance analysis as one of the key measures to assess the usefulness of such information (Ball and Brown, 1968; Archibald, 1972; Ball, 1972; Staubus, 1976; Barth, et al., 1996; Venkatachalam, 1996; Hassan et al., 2006a; Li and Gao, 2007; Hassan and Mohd-Saleh, 2010). Indeed, Barth et al. (2001) suggested that value relevance analysis is a joint test of relevance and reliability of accounting information. In this regard, relevance and reliability are considered the primary characteristics for information to be useful (Barth et al., 2001; Holthausen and Watts, 2001; FASB, 2006; IASB, 2006; 2008; 2010).

Fifth, an analysis of the value relevance of FI disclosure for companies with a high versus a low level of FI-related information revealed that the level of that information provided matters to stock market participants. Specifically, a significant association was found between a high level of FI-related information and high share prices; it had a significant and positive coefficient. However, this was not the case for companies with a low level of FI-related information; a negative relationship was documented between the two variables. This result implies that investors value companies with greater levels of FI disclosure more highly when making investment decisions. One reason for this finding is that high levels of FI disclosure may have reduced the perceived riskiness of such companies' shares. Another

reason for the result is that high levels of FI disclosure may act as a signal to the market about the quality of the top management team (Gelb and Zarowin, 2002) and increase investors' confidence in the view that their firm is well run. Whatever the reason, this finding supported the fifth hypothesis examined in the thesis: the relative value relevance of FI disclosure is higher for companies exhibiting higher levels of compliance with FI disclosure requirements.

Sixth, a more disaggregated analysis of the value relevance of the sub-categories of FI disclosure revealed that investors look at certain information about FIs when making decisions. In particular, the principal components analysis and regression tests indicated that *Fair Value, Balance Sheet, Income Statement* and *Risk Information* matter when valuing companies. Indeed, Risk Information has become more important than Income Statement disclosures after IFRS 7 was implemented. This reflects the IASB's approach to making the balance sheet the key document among the financial statements in the annual reports as the Balance sheet now includes both the carrying amount and fair value of FIs (IASB, 2006; Whittington, 2008a). Thus, investors can estimate gains or losses on FIs without looking at the income statement. As a result, the income statement has been relegated to being viewed as a secondary document as when compared to the balance sheet under the IASB's approach. Another reason for this result could be that users of accounting information have long become used to the income statement information which was required by IAS 39 which has remained unchanged under IFRS 7 (Black and White, 2003; Lara and Mora, 2004). In addition, IFRS 7 reflects a new approach that emphasises risk information associated with FIs; the new standard devotes a significant part of its requirements detailing required information on the risks arising from FI usage including

both quantitative and qualitative information (IASB, 2006). By and large, the evidence in Chapter 7 is in line with the conceptual framework of the IASB which argues that the primary objective of the financial statements is to provide useful information for users (mainly investors and creditors) of such statements. Indeed, the findings based on the notion behind MBAR suggest that the market reaction to accounting information expresses the aggregate behavior of all investors. This finding supports the final hypothesis proposed by the current study: the relationship between components of FI disclosure and a firm's market value varies from one component to another.

The analysis provided by the two pieces of empirical work lends support for the theoretical framework of the current study: the decision usefulness approach. In particular, the accounting standards examined in the current study in general, and IFRS 7 in particular, appear to have been successful according to the decision usefulness criterion which underpins the standards-setting approach of the IASB. In particular, the empirical analysis reveals some aspects of usefulness, namely: comparability and relevance were present in the disclosures mandated by IFRS 7. First, the analysis of FI disclosure within and across sectors indicated that the comparability of FI disclosure in general, and balance sheet and fair value disclosures in particular, improved significantly. Second, the value relevance analysis of FI disclosure revealed that investors appear to value such information when making investment decisions; a significant and positive association was documented between FI disclosure and firm value. In addition, the value relevance analysis revealed that investor value companies with a high level of FI disclosure; specifically, a significant and positive association was found between companies with a relatively high level of FI disclosure and firm value; this was not the case for companies with a relatively low level of

FI disclosure. This suggests that the improved disclosure under IFRS 7 was useful. Hence, the findings provide support for the IASB's belief that the accounting standards which is has promulgated (e.g. IFRS 7) appear to have provided useful information for economic decision-making.

The results of this thesis offer some insights for the international (IASB) and national (Jordanian) regulatory bodies about the adherence of Jordanian listed companies with IFRS. First, the results provide support for international accounting regulators (mainly the IASB) on the impact of disclosure regulation on improving the supply of corporate information. Specifically, the findings provide some feedback to the IASB about the relevance of its accounting standards (including IFRS 7) for a developing country such as Jordan. In addition, the findings could be considered by the IASB when revising accounting standards in general and IFRS 7 in particular. Thus, the results might be part of evidence considered by the IASB if it decides to conduct a post-implementation review of IFRS 7. The results also provide some insights for the IASB into how the capital market perceives the information provided under new accounting standards such as IFRS 7. Given the Anglo-American perspective which dominates the international accounting standard-setting (Gallhofer and Haslam, 2007), the current results provide valuable clues about the acceptance of, and the reaction to, such standards for a developing country such as Jordan with its different contextual and institutional settings.

Second, the results provide timely findings to Jordanian authorities given the reforms which are currently in progress; in order to strengthen existing regulations, these results may be reviewed; stringent enforcement mechanisms are needed to ensure full compliance with accounting standards. In addition, the results should provide insights for the JSC and the ASE about the relevance of adopting IFRS by Jordanian listed companies. These insights

may also have policy implications for other developing countries that are working hard to improve the quality of financial reporting for their business entities. For example, the findings of the current study could encourage other developing countries that still employ national accounting standards to adopt IAS/IFRS. Given the value relevance of FI disclosure documented in the current study, regulatory bodies should ensure that all listed companies' financial statements are made public in a timely fashion so that new information can be reflected in the market value of the firm. Moreover, the findings of the present study should provide some insights for the ASE about the efficiency of the stock exchange; specifically, the results may provide valuable information for the ASE about how the capital market reacts to new information published.

8.4 Limitations and Future Research

As with any research, the current study is subject to a number of limitations. First, this study has only investigated the impact of IFRS 7 for the first year of its adoption in the financial statements of Jordanian listed companies in 2007. An analysis of data from subsequent years may be needed before any trends can be confirmed. Specifically, companies may need some time in order for any worries to dissipate about being placed at a competitive disadvantage by IFRS 7 disclosures. Further, several years of data produced under IFRS 7 may be needed before researchers are able to adequately assess the usefulness of the information provided. The value relevance of FI disclosure is examined pre- and post- the implementation of IFRS 7. Most of the variables in the analysis have been hand-collected from annual reports. This procedure was time-consuming precluding the inclusion of more years in the analysis. Thus, a longitudinal study of compliance with the new

standard on FI reporting would be helpful to see if the disclosure trends identified in this thesis as well as the value relevance of such information continue into the future.

Second, the current study examines the usefulness of FI disclosure using security evaluation which is subject to measurement errors as well as sampling problems. Thus, further research is needed to confirm the results obtained. For example, examining the perceptions of financial statement users and preparers about IFRS 7 would be a very different research approach to addressing the questions examined in the current thesis which may yield further insights about the decision usefulness of the new standard's disclosures. In addition, studies about the ability of FI information produced under IFRS 7 to forecast future earnings or predict firm risk need to be undertaken in future research. These studies might shed some light on how any IFRS 7 related information is used by and useful to decision makers.

Third, given the time constraints involved in doctoral studies, the present investigation was conducted on a single nation; the circumstances in Jordan gave rise to the importance of the current study. However, this uniqueness obviously limits the extent of any generalisability among the findings. Thus, a cross-country comparative analysis is needed in order to examine the application of IFRS 7 in a developing country context. This may yield greater insights for international standard-setters about the implications of the introduction of such standards in emerging economies. In addition, such an examination would facilitate an analysis of the impact of differing cultural norms on the implementation of an international accounting standard such as IFRS 7.

Fourth, the current study did not examine Jordanian listed companies' online FI disclosure practices for both 2006 and 2007 (i.e. companies' websites). Such disclosure is an important area for future research to examine. In particular, companies are now using several channels of communication in order to convey information about their performance to investors and other stakeholders; analysts meetings (Barker, 1999a, 1999b), online reporting (Shepherd et al., 2001, Al-Htaybat, 2010) and informal discussions (Holland, 1998) are some of these channels. Presumably, issues relating to the performance of FIs arise in these communications but these are not covered in the current thesis. Analysis of these disclosures may provide a more comprehensive picture of FI disclosure practices amongst Jordanian listed companies.

Fifth, the research methodology employed by the current study involved the use of empirical models to statistically test the hypotheses proposed. Thus, an alternative research methodology could involve a combination of quantitative and qualitative approaches. For example, interviews or questionnaires could be sent to companies' accounting preparers and users asking them to comment on the perceived relevance and reliability of the FI disclosure under IFRS 7. Sixth, the focus of the current study is to investigate the impact of the implementation of IFRS 7 on FI disclosure provided by Jordanian listed companies as compared to that supplied previously. The current study recognises that FI disclosure may be influenced by other factors such as firm characteristics and corporate governance rules. Although this was outside of the scope of the current study, future research could profit from such investigations.

Finally, the use of the disclosure index method involved some exercise of judgment by the researchers about the items mandated by IAS 30/32 and IFRS 7 on FI disclosure; a degree of subjectivity was involved. However, this element of subjectivity was minimised as much as possible by ensuring that the index used in the current thesis was as reliable and valid as possible; Chapter 5 detailed the process of constructing the disclosure index which included a number of stages in order to ensure that the index was reliably and validly constructed. Therefore, it is believed that the disclosure index employed was suitable for the purposes of the research.

In general, this study has a number of limitations that have been recognised by the researcher. Nevertheless, despite these limitations, it is believed that the findings of the study represent a significant contribution to knowledge. It is the first study of its kind in Jordan; it has contributed to the growing literature on financial disclosure in developing countries in general and on FI disclosure in developing countries in particular. Specifically, the investigation of FI information disclosures and compliance with a new standard such as IFRS 7 in the annual reports of Jordanian listed companies represents a contribution of the current study. In addition, an assessment of the value relevance (usefulness) of IFRS 7 disclosures according to market valuation has not been previously conducted for Jordan. The current thesis has therefore contributed to our understanding about the quantity and usefulness of FI information changes under IFRS 7 as compared to IAS 30/32; this should add great insight to the global picture about how the standard (IFRS 7) was implemented in a developing country. Moreover, this study might be useful for Jordanian policy-makers as well as local, international and potential investors since it provided an objective assessment about the current situation of compliance with FI reporting requirements among Jordanian

listed companies. Future avenues of research can build on the results that are reported for Jordanian companies in the current thesis; it should provide a basis on which future research can build.

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Appendices

Appendix 5.1
Special World Format for Disclosure Checklist

Item No.	Post-IFRS 7 Index	Page No.	Score	Pre-IFRS 7 Index	Page No	Score
	Accounting Policy Disclosures for Each Class of Financial Instruments (FI)					
1	The nature of FI			The nature of FI		
2	Terms and conditions for FI designation			Terms and conditions for FI designation		
3	Recognition and measurement of FI			Recognition and measurement of FI		
4	Terms and conditions of impairment			Terms and conditions of impairment		
	Balance Sheet Disclosure					
5	FI at fair value (FV) through Profit or Loss (P&L) - held for trading			FI at FV through P&L - held for trading		
6	FI at FV through P&L – designated			FI at FV through P&L – designated		
7	Held-to-maturity investments			Held-to-maturity investments		
8	Available-for-sale financial assets			Available-for-sale financial assets		
9	Loans and receivables			Loans and receivables		
10	Financial liabilities measured at amortised cost			Financial liabilities measured at amortised cost		
11	**The carrying amounts of each class of FI**			**Not Required 1**		
	Income Statement Disclosures for Each Class of FI					
12	Net gains/losses by classes of FI			Net gains/losses by classes of FI		
13	Interest income			Interest income		
14	Interest expense			Interest expense		
15	Fee income			Fee income		
16	Interest income on impaired FI			Interest income on impaired FI		
17	Impairment losses			Impairment losses		
	Hedge Accounting Disclosure					
18	Description of each type of hedge			Description of each type of hedge		
19	FI designated as hedging instruments and their FV			FI designated as hedging instruments and their FV		
20	Nature of risks being hedged			Nature of risks being hedged		
21	Recognised gains/losses on Hedge ineffectiveness			**Not Required 2**		

22	For FV hedge: Gains or losses on hedging instruments			For FV hedge: Gains or losses on hedging instruments		
	Information on Cash Flow Hedge (CFH)					
23	Gains or losses on CFH			Gains or losses of CFH		
24	Period when CFH are expected to occur and affect P&L			Period when CFH are expected to occur and affect P&L		
25	Forecast transaction for which hedge can be used			Forecast transaction for which hedge can be used		
26	Amount recogniSed/removed in/from equity during the period			Amount recogniSed/removed in/from equity during the period		
	Fair Value Disclosure for FI by Classes					
27	Measurement methods			Measurement methods		
28	Information if FV cannot be measured			Information if FV cannot be measured		
29	Fair values for each class of FI			Fair values for each class of FI		
30	Changes in FV of FI			Changes in FV of FI		
31	Comparable carrying amounts			**Not Required 3**		
32	Amount recognised/removed in/from equity			Amount recognised/removed in/from equity		
	Qualitative Risk Disclosure					
33	How the risks arise			**Not Required 4**		
34	Objectives, policies and processes for managing the risks			**Not Required 5**		
35	Methods used to measure the risk			**Not Required 6**		
36	Changes(in 36,37,38) from previous period			**Not Required 7**		
	Quantitative Risk Disclosures					
	Credit Risk Disclosure					
37	Maximum exposure to credit risk			Maximum exposure to credit risk		
38	Concentration of credit risk			Concentration of credit risk		
39	Credit quality of FI that are neither past due nor impaired			**Not Required 8**		
40	Collateral held as security and other credit enhancements			**Not Required 9**		

Notes: This appendix shows the special word form that was completed for each company when examining the annual reports.

Appendix 6.1

The Results of Normality Tests Applied

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	DF	Sig	Statistic	DF	Sig
Pre-IFRS 7						
Accounting Policies	0.278	82	0.000	0.796	82	0.000
Balance Sheet	0.297	82	0.000	0.848	82	0.000
Income Statement	0.316	82	0.000	0.755	82	0.000
Hedge Information	0.433	82	0.000	0.356	82	0.000
Fair Value	0.377	82	0.000	0.692	82	0.000
Risk information	0.269	82	0.000	0.808	82	0.000
Other Disclosures	0.527	82	0.000	0.311	82	0.000
Overall FI Disclosure	0.187	82	0.000	0.904	82	0.000
Post-IFRS 7						
Accounting Policies	0.243	82	0.000	0.822	82	0.000
Balance Sheet	0.261	82	0.000	0.876	82	0.000
Income Statement	0.302	82	0.000	0.846	82	0.000
Hedge Information	0.344	82	0.000	0.610	82	0.000
Fair Value	0.316	82	0.000	0.797	82	0.000
Risk information	0.120	82	0.000	0.943	82	0.000
Other Disclosures	0.393	82	0.000	0.668	82	0.000
Overall FI Disclosure	0.092	82	0.000	0.970	82	0.000

Notes: This appendix shows the results of the normality tests that were applied to the variables examined including both the Kolmogorov-Smirnov and Shapiro-Wilk tests.

Appendix 6.2
The FI Disclosure Ratio for the Sample Firms by Categories for the Years of 2006 and 2007

No.	Company	FI Disclosure Categories																			
		Pre-IFRS 7: 2006										Post-IFRS 7: 2007									
		AP %	BS %	ISD %	HD %	FVD %	RD %	OD %	OVD %	AI	AID	AP %	BS %	ISE %	HD %	FVD %	RD %	OD %	OVD %	AI	AID
Banking Sector																					
1	ABCO	50	67	50	25	80	80	0	48	40	19	100	86	67	100	100	86	71	87	53	46
2	AHLI	50	67	17	13	60	88	0	49	43	21	100	86	83	100	100	93	29	85	53	45
3	AJIB	50	67	50	13	60	63	0	42	43	18	100	86	67	44	100	86	29	72	53	38
4	ARBK	100	83	17	100	80	67	0	75	44	33	100	100	83	100	100	100	71	94	53	50
5	BOJX	100	83	17	38	60	71	0	57	42	24	100	86	83	56	100	100	43	81	53	43
6	EXFB	75	83	17	0	80	86	33	57	42	24	100	100	67	33	83	57	71	68	53	36
7	JDIB	50	67	50	0	40	80	0	38	40	15	100	86	50	44	83	79	43	68	53	36
8	CABK	75	67	17	13	60	57	17	55	44	24	100	71	83	100	83	86	57	83	53	44
9	JIFB	50	83	17	38	60	57	0	50	42	21	100	86	83	100	100	86	43	85	53	45
10	SGBJ	50	67	17	0	80	86	0	50	42	21	75	71	83	0	83	93	43	64	53	34
11	THBK	75	83	50	13	80	78	33	57	44	25	100	86	83	100	100	79	71	87	53	46
12	UBSI	75	67	17	13	60	100	0	50	40	20	100	86	83	44	83	93	57	77	53	41
Overall FID		**67**	**74**	**61**	**22**	**67**	**78**	**11**	**52**	**-**	**22****	**98**	**86**	**76**	**69**	**93**	**86**	**52**	**75**	**-**	**42****
Financial Services Sector																					
13	AAFI	75	67	50	13	80	0	0	38	40	15	100	86	67	11	83	57	14	55	53	29
14	AEIV	50	50	50	0	40	0	0	25	40	10	100	71	67	0	83	57	0	49	53	26
15	AFIN	50	33	50	0	60	0	0	25	40	10	75	86	67	0	83	57	0	49	53	26
16	AMAL	50	50	50	0	40	0	0	25	40	10	50	71	50	33	83	50	0	47	53	25
17	AMWL	50	50	50	0	80	0	0	34	35	12	50	100	67	11	83	57	0	56	48	27
18	BLAD	50	33	50	0	60	0	0	32	34	11	50	86	50	0	83	57	29	55	47	26
19	JEIH	50	50	50	0	40	0	0	25	40	10	100	100	67	0	83	14	0	42	53	22
20	JIGC	50	50	50	0	60	0	0	28	40	11	100	86	67	11	83	64	0	55	53	29

21	JOIT	25	33	50	0	40	0	0	20	40	8	75	86	50	0	83	64	0	49	53	26
22	JOMC	50	50	50	0	40	0	0	25	40	10	75	71	50	0	83	43	0	42	53	22
23	SANA	25	50	50	0	40	0	0	23	40	9	75	71	67	33	83	57	0	53	53	28
24	UCFI	25	33	50	0	80	0	0	25	40	10	100	71	67	0	100	50	0	49	53	26
25	AMAD	25	50	17	0	60	0	0	25	36	8	50	43	33	11	50	21	14	30	49	15
26	ARED	50	50	50	0	60	40	0	33	40	13	100	86	67	0	100	71	0	57	53	30
27	COHO	25	33	17	0	40	0	0	16	37	6	50	86	67	0	50	21	0	36	50	18
28	DERA	25	33	50	0	60	29	0	26	42	11	100	86	67	11	100	57	0	55	53	29
29	EMAR	25	33	17	0	60	0	0	18	40	7	50	57	17	0	100	29	0	32	53	17
30	IDMC	25	50	50	0	60	29	0	29	42	12	50	71	50	0	83	57	14	45	53	24
31	IEAI	25	50	50	0	60	58	0	33	42	14	75	71	67	11	100	100	43	68	53	36
32	IHCO	25	33	17	0	40	0	0	15	40	6	75	86	17	0	50	36	0	34	53	18
33	INMA	50	50	50	0	60	80	0	38	40	15	100	86	67	0	83	71	0	55	53	29
34	JDPC	50	50	50	0	60	58	0	36	42	15	100	100	83	0	100	93	0	66	53	35
35	JNTH	25	50	17	0	40	0	0	18	38	7	75	43	17	0	67	29	0	29	51	15
36	JRCD	25	50	17	0	60	29	0	23	42	10	75	57	67	14	67	57	0	45	53	24
37	SPIC	25	50	50	13	60	29	0	31	42	13	50	86	67	29	50	57	29	53	53	28
38	ULDC	50	50	50	0	60	29	0	31	42	13	100	86	100	57	83	43	43	58	53	31
Overall FID		**38**	**46**	**42**	**01**	**55**	**15**	**01**	**27**	**-**	**11****	**77**	**78**	**58**	**07**	**81**	**53**	**08**	**48**	**-**	**25****
Services Sector																					
39	ITSC	25	50	17	0	0	0	0	13	40	5	75	43	67	0	67	36	0	36	53	19
40	JETT	50	50	50	0	60	83	0	39	41	16	100	86	67	0	100	86	0	60	53	32
41	JITC	25	67	17	0	60	29	0	26	42	11	50	86	67	0	50	29	0	36	53	19
42	JMIL	50	67	50	0	60	0	0	30	40	12	50	71	67	0	50	29	0	34	53	18
43	JOEP	25	50	50	13	60	89	0	43	44	19	50	57	67	43	83	86	43	60	53	32
44	JOPP	25	67	17	0	60	0	0	23	40	9	50	86	67	0	83	50	0	45	53	24
45	JETL	50	83	50	13	60	86	0	48	42	20	100	86	67	57	100	21	43	60	53	32
46	MALL	50	50	17	0	60	29	0	26	42	11	50	57	17	0	83	71	0	42	53	22

47	MSFT	25	50	17	0	60	0	0	25	32	8	50	86	50	0	83	50	0	51	45	23
48	NAQL	25	33	17	0	60	0	0	18	40	7	50	57	33	0	83	57	0	40	53	21
49	ORTC	25	50	50	0	60	0	0	25	40	10	50	86	50	0	83	29	0	42	53	22
50	PRES	50	50	50	0	60	58	0	36	42	15	100	86	67	43	100	86	43	75	53	40
51	RUMM	25	50	17	0	60	0	0	22	36	8	50	71	17	0	83	21	0	33	49	16
52	RYJO	25	83	50	13	60	86	0	45	42	19	75	100	67	29	100	86	29	70	53	37
53	SHIP	50	83	33	0	60	83	0	42	41	17	100	100	67	0	100	93	0	64	53	34
54	SPTI	25	50	17	0	60	29	0	24	42	10	50	57	33	0	67	71	0	42	53	22
55	TAJM	25	50	50	0	60	29	17	31	42	13	75	57	67	43	83	86	43	58	53	31
56	WIVI	25	67	50	0	60	0	0	28	40	11	25	71	33	0	83	21	0	32	53	17
Overall FID		**33**	**58**	**34**	**02**	**57**	**33**	**01**	**30**	**-**	**11****	**64**	**75**	**54**	**11**	**82**	**56**	**12**	**48**	**-**	**25****
Manufacturing Sector																					
57	AEIN	25	67	17	0	60	29	0	26	42	11	75	71	67	14	83	57	0	49	53	26
58	APHL	25	67	17	0	60	0	0	24	38	9	25	71	17	0	83	64	0	41	51	21
59	ASPMM	25	33	17	0	60	0	0	25	40	10	75	86	67	0	83	64	0	52	53	28
60	CEIG	25	50	17	0	60	29	0	24	42	10	50	86	17	0	83	71	0	45	53	24
61	DADI	50	67	17	0	60	29	0	29	42	12	75	100	67	0	83	71	0	55	53	29
62	EICO	25	50	17	0	60	40	0	25	40	10	75	86	17	0	83	71	0	47	53	25
63	EKPL	0	50	17	0	40	0	0	16	37	6	25	43	17	0	50	21	0	22	50	11
64	GJCC	25	50	50	0	60	40	0	30	40	12	50	71	67	0	83	71	0	51	53	27
65	HPIC	25	50	17	0	80	0	0	23	40	9	50	57	17	0	67	57	0	36	53	19
66	ICER	25	50	17	0	60	0	0	21	39	8	50	71	33	0	83	71	0	46	52	24
67	INOH	50	50	17	0	60	40	0	28	40	11	50	57	17	0	67	57	0	36	53	19
68	IPCH	50	67	17	0	60	0	0	25	40	10	50	71	17	0	50	29	0	28	53	15
69	JOCM	50	67	50	0	60	86	0	43	42	18	100	86	67	0	100	86	0	60	53	32
70	JOIR	25	50	17	0	60	0	0	22	36	8	50	71	17	0	83	21	0	33	49	16
71	JOPH	50	83	50	13	60	83	0	46	41	19	100	86	83	33	83	100	43	75	53	40
72	JOPT	50	50	50	13	80	89	0	48	44	21	100	100	67	44	100	100	29	77	53	41

73	JOST	50	50	50	0	60	80	0	38	40	15	100	86	67	0	83	86	0	58	53	31
74	JPOI	25	50	17	0	60	0	0	25	32	8	50	43	33	0	50	21	0	29	45	13
75	MBED	50	67	17	0	60	0	0	25	40	10	75	86	17	0	83	79	0	49	53	26
76	MPHA	50	67	17	0	80	0	0	28	40	11	100	71	33	0	100	57	0	47	53	25
77	NATC	25	83	17	0	60	0	0	25	40	10	75	71	17	0	67	50	0	38	53	20
78	NATA	25	50	17	0	60	0	0	21	38	8	25	71	50	0	100	21	0	35	51	18
79	RMCC	75	83	17	0	60	29	0	33	42	14	100	100	67	0	100	50	0	53	53	28
80	UMIC	50	50	17	0	60	29	0	26	42	11	75	71	33	0	83	79	0	49	53	26
81	UTOB	50	50	17	0	60	0	0	23	40	9	50	86	67	0	83	64	0	49	53	26
82	WIRE	25	83	17	0	60	29	0	29	42	12	50	86	33	0	83	64	0	45	53	24
Overall FID		**37**	**56**	**24**	**01**	**62**	**24**	**00**	**28**	**-**	**11****	**65**	**76**	**41**	**04**	**81**	**61**	**03**	**46**	**-**	**24****

Notes: This table presents the proportion of FI disclosure for the sectors examined in the current study by items and categories pre-and post-IFRS 7's implementation. The second column of the Table (Company) includes the symbols of the Jordanian listed companies. AP: Accounting Policies Disclosures, BS: Balance Sheet Disclosures, HD: ISD: Income Statement Disclosures, Hedge Disclosures, FVD: Fair Value Disclosures, RD: Risk Disclosures, OD: Other Disclosures, AI: Applicable Items, AID: Actual Items Disclosed, FID refers to Financial Instrument Disclosure **: the average number of disclosed items across banks.